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In Memory of DR. AUGUSTUS McSHANE, (1862-1923).

Editor and Publisher of the New Orleans Medical and Surgical Journal (July 1891—July, 1896).

(A brief notice of the death and funeral of Dr. Augustus McShane appeared in the last issue of the Journal. But apart from the sympathy and condolence expressed to the bereaved family, the Editor felt that something more than a passing notice was due to the memory of one who, for nearly four decades of loyal service to the profession, during which he had participated in many of the movements which have marked the progress of medicine in this community and state,—should be honored by a more personal tribute of his sterling worth. The readers of this Journal (which he owned and edited during five years), among whom are so many of Dr. McShane's pupils, associates and personal friends will no doubt share our pleasure in the publication of the following biographic sketch by Prof. Matas which reflects in many ways the warmth of friendship and affection that Dr. McShane inspired in those whom he held close to his heart.—The Editor.)

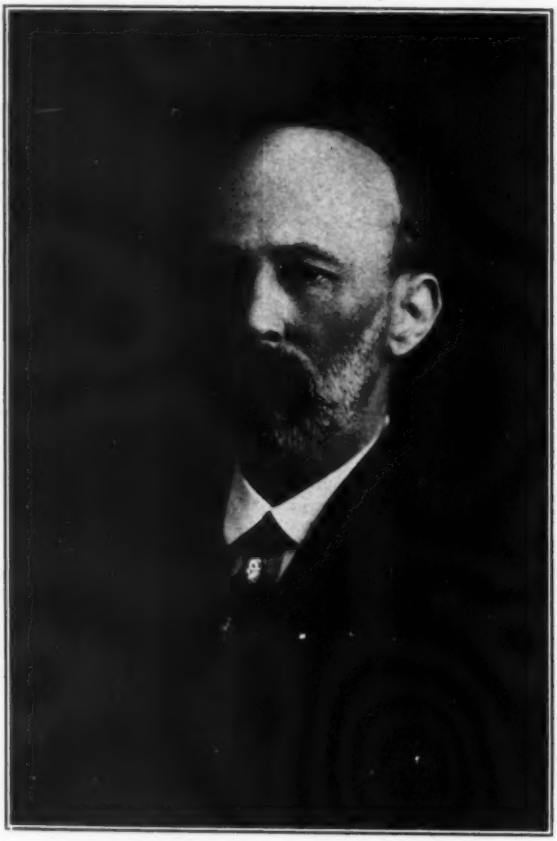
"I know thy works and charity, and service."
Rev. 2, 19.

Dr. McShane was born in New Orleans on January 31, 1861, and was approaching his sixty-third year at the time of his death. He was of direct Irish descent on the paternal side. His father, Edward McShane, was born in Liverpool, England, in 1824. He became a permanent resident of New Orleans in 1848; was naturalized as an American citizen in 1853, and died in 1886, four years after Dr. McShane's graduation. Edward McShane had been a contractor and real estate agent, but soon entered the service of the Illinois Central Railroad and remained an official of this road until his death. He was an unpretentious man of modest educational attainments, but possessed of an unusual intelligence and common sense. He was universally recognized as a man of absolute integrity and exemplary habits. Dr. McShane regarded his father as his wisest counselor, and his death, at the very inception of his professional career, as a veritable calamity which he never ceased to deplore throughout his life.

As is told in Fortier's Louisiana Biographies, Edward McShane traced his lineage to Shane O'Neill of Shane Castle, County Antrim in the north of Ireland. Dr. McShane's mother, Lydia Ann Chapman, was of English stock. She died in 1875, when Dr. McShane was scarcely 14 years old. Her ancestors came to this country from Hull, England, in 1639. They settled in Massachusetts, where the Chapman family had been intimately associated with the history of that state. Dr. McShane's great grandfather, Daniel Chapman (1740-1779) served as a soldier in the Revolutionary Army. He located at Boxford, Mass., in 1864, and there resided until the time of his death. He twice represented his district in the Massachusetts legislature. Several of the members of the Chapman family served in the Revolutionary Army, and it was through this connection that Dr. McShane was a member of the sons of the American Revolution.

Dr. McShane was educated in the public schools of New Orleans and finished in the Boys' High School. His medical education began in 1879 when he entered the medical department of the University of Louisiana (now Tulane). He was graduated M. D., in 1882, after serving an interneship at the Charity Hospital for two years. He was quarantine officer of the Louisiana State Board of Health at Port Eads in

1884 and at Pass a l'Outre for the following two summers. In the meantime he was preparing himself for the specialty of the Ear, Nose and Throat, which was beginning to receive recognition as a distinct specialty through the pioneer efforts of Dr. de Roaldes—the recognized father of the specialty in New Orleans. When through the personal efforts of this extraordinary leader, the first Eye, Ear, Nose and Throat Hospital was established in this city on December 5th, 1889, Dr. McShane was ready to co-operate with his chief as his first assistant. He served faithfully and gratuitously in this institution for twelve consecutive years. In late years he served as visiting laryngologist to the Charity Hospital, six years (1909-1915). In April, 1885, he was appointed assistant demonstrator of Anatomy in the Medical Department of the University of Louisiana and served in this capacity for nearly ten years (April, 1885-September 28, 1894). He resigned in order to devote himself to his growing practice, when the writer, then demonstrator in charge of the anatomical laboratory, was promoted to the Chair of Surgery.



AUGUSTUS McSHANE, M. D., 1862-1923
Editor and Publisher of the New Orleans Medical and Surgical Journal, July, 1891-July, 1896.

While still an interne at Charity Hospital, Dr. McShane had identified himself as one of the small circle of young medical friends who circled about the home life of Dr. H. D. Schmidt, for over fifteen years the pathologist of the Charity Hospital, and for over a quarter of a century known all over the country as a histologist and pathologist of rare ability. Though

scarcely known to the men of the present generation, Dr. Schmidt was the most conspicuous and, in fact, a unique figure in Louisiana and the South, as the only specialist exclusively devoted to microscopy, pathology and bacteriology in his day. Stricken by a most virulent type of arthritis deformans, which had crippled practically every joint and left him an invalid for many years, he was literally pinned to his laboratory chair with no power of locomotion other than that which was furnished by the wheels of the rolling chair in which he moved from the Charity Hospital to his home near the hospital. Notwithstanding these seemingly invincible obstacles, Dr. Schmidt was cheerful, resigned, and adapted himself with marvellous ingenuity to his handicaps and by working incessantly and enthusiastically, poured a steady stream of original contributions in hematology, neurology, comparative anatomy, embryology and gross pathology, which were unexcelled in the literature of his time and gave him a well deserved national and international reputation. In consequence of his infirmities it was impossible for Dr. Schmidt to attend medical meetings, but his yearning for sympathetic companionship led him to encourage the formation of a little coterie of young medical men whom he rewarded for their loyalty by admitting them to his inner sanctum. It was at his home, not far from the Hospital, that he, aided by his good and devoted wife, dispensed and retailed to us his vast store of lore in pathology and allied subjects, especially in the domain of evolution and positivistic philosophy in which he had unalterable convictions. In this way, a small, but congenial club was formed by his favorite internes who, after their graduation, continued to frequent his hospitable home. Thus it happened that Dr. Schmidt's home became the regular meeting place for the internes and ex-internes of the Charity Hospital, who in the 80's kept up their interest in microscopy and pathology through Dr. Schmidt's encouragement and hospitality. This informal nucleus of a club was dubbed the New Orleans Pathologic Society with Dr. Schmidt as perpetual president, and Drs. P. E. Archinard, F. W. Parham, A. McShane, H. William Blanc, Ernest Laplace (now of Philadelphia), Henry D. Bruns, George B. Lawrason, and the writer, were the most faithful members. The club met periodically and was continued until the last illness of the venerable president which ended his life in January, 1889.

It was to the inspiration and experience gathered by this close contact with an exceptionally competent and enthusiastic teacher that the group of men above mentioned obtained their first knowledge of practical microscopy and pathology and which served as a foundation to many of these in their later professional activities.

It was through Dr. Schmidt's example and influence that Dr. McShane developed a strong taste for, and ability in clinical microscopy for which he retained a decided leaning throughout his life. He taught clinical microscopy in the quiz class which was organized in the medical department in 1886-1887 by the same group of ambitious young teachers.

It was on August 28, 1890, while Dr. McShane was assistant pathologist at the Charity Hospital (Dr. H. D. Bruns having succeeded Dr. Schmidt as Pathologist) that the first case of infestation with the Filaria Sanguinis Hominis was recognized in Louisiana. A young Cuban cigar maker, suffering with a chylocele of the tunica vaginalis testis, was admitted to the writer's surgical service at the Charity Hospital. The disease had been contracted in Cuba, and the parasitic nature of the chylocele was strongly suspected. The presence of the filaria sanguinis in the United States had been previously discovered by Dr. John Guiteras at Charleston, S. C., in 1886, and its endemic prevalence in the South Atlantic States had been demonstrated by De Saussere of Charleston, in residents of that city in a series of observations from 1886 and 1890. Dr. William H. Mastin, of Mobile, had also reported in 1889 a case of Filariasis in which the parent and embryo parasite had been identified in a chylocele of the scrotum. These discoveries in quick succession had developed in the South a keen interest in the lymphatic lesions and diseases caused by

this extraordinary tropical parasite and its intermediary host, the mosquitoes. Therefore when this patient was admitted to the writer's service at the Hospital his mind was well prepared for the discovery of the filarial embryo in the fluid of the chylocele and in the blood of the patient by Dr. McShane, to whom the microscopic search for the parasite had been entrusted. Dr. McShane's very lucid and complete report of his most interesting finding of embryo filariae in the blood of the patient in a series of observations made at night is a most interesting document. It is quoted in full in the writer's essay on filarial disease as illustrated by this case, which was published in the New for January, 1891. This incident is cited to show not only Dr. McShane's Orleans Medical and Surgical Journal thorough competence and ability as a microscopist and laboratory worker, but to give him just credit for his participation in a discovery which is important in the history of parasitology in Louisiana.

A year after the New Orleans Polyclinic (now graduate school of Tulane) was organized and in its rise and development, Dr. McShane took a very active part.

He first taught in the laboratory of clinical microscopy and he subsequently limited his teaching to otology, laryngology and rhinology in association with Dr. de Roaldes at the Senses Hospital and continued to serve in the latter capacity for twelve years when he was compelled to resign on account of ill health.

He became sole editor and publisher of the New Orleans Medical and Surgical Journal in 1891, and continued in charge of the Journal until July, 1896, when the ownership was transferred to Drs. Chassaignac and Dyer. He was for three years Secretary of the Orleans Parish Medical Society and by reason of his connection with the Journal and the Medical Society was able to very considerably increase the membership of the latter.

In the midst of these numerous occupations he found time to cultivate his tastes for medical literature by writing frequent reviews and translations from German, French, Spanish and Italian journals, a reading knowledge of which he had acquired with wonderful facility and through his own auto-didactic efforts while still an undergraduate interne at Charity Hospital. After he had acquired a good working knowledge of the more familiar European languages he seemed to amuse himself by making translations from the Dutch and Scandinavian authors—Swedish, Norwegian and Danish. He often said that if he could only have spared the time he would have expanded his translating capacity to the Russian and Chinese which he had investigated sufficiently to satisfy him that he could acquire enough readily for practical medical purposes. No one who knew his genius for languages could doubt for an instant his perfect ability to make good any claim that he might make in this direction. He was a born philologist and the mastery of foreign languages was all play for him, and his numerous contributions, which are embodied in the columns of this journal for nearly forty years following his graduation in medicine, attest to his omnivorous reading as well as to his polyglot versatility. Apart from his translations and editorials, his original contributions to medicine, while not voluminous, comprise a wide range of subjects which make up a diversified bibliography and show that though a specialist in his chosen field—Laryngology and Rhinology,—his inquiring mind had surveyed the whole field of medicine.

When he became editor of the Journal he was a young man full of enthusiasm, energy and ambition, but like so many medical editors—with practically no experience in journalism and still less in its financial problems. However, he brought to the editorial chair a fine brain, a progressive spirit and an independent mind free from partisan bias or prejudice, bent solely upon service to the medical profession of this city and state. He was always ready to champion any cause or measure that he thought was for the betterment and elevation of his profession, just as he was ready to condemn with equal vigor, any movements or influences that were calculated to injure it. His editorials advocating reform in nursing and in other

ways at the Charity Hospital and his discussions on state medical licensing boards and on other matters which engrossed the attention of the medical profession during his editorship, attest to his courage and his fidelity to the highest professional ideals. While ever reasonable, modest and retiring he was always an idealist and an optimist. His mind was an open book. He was incapable of dissimulation. He always expressed his opinions with honesty and frankness and seemed to care little or nothing for the effect it might have on his purely personal interests. When he engaged in any new enterprise which he deemed worthy of his mettle, he gave it his whole heart and soul. He took a great interest in public affairs and, though not a politician, he showed the same independent spirit that he did in his profession. He enthusiastically entered into every reform movement organized to improve the administration of the city. He never thought of the sacrifice and cost of his devotion. He knew nothing of craft, cunning or intrigue to gain a point or to favor his private ends and, in this sense, he was no diplomat. He gave his time and talent without stint and without thought of material compensation, and, in this way, again he was quixotic, improvident and failed to cultivate a plethoric bank account. This disinterested and idealistic attitude he displayed in his practice. He treated a daily throng of patients gratuitously to the detriment of a paying clientele solely because of his deep sympathy with the poor and the working classes and the love of the work itself. He found sufficient reward in the solution of the many varied and technical problems that his clients brought to him. He loved his work passionately, very much as a clubman loves his cards, a golfer his links, a sportsman his gun and dogs, or a fisherman his rod and fishing tackle. His diversions were chiefly found in the periodical literature and his favorite authors. After marriage, in 1903, he found his greatest comfort and solace in the bosom of his family.

His splendid memory which served him so well in his philologic acquisitions was also displayed to advantage in many other ways. During the three years that he was secretary of the Orleans Parish Medical Society (1893-95) there were no paid official stenographers to report the proceedings as at present. His reports, however, were remarkable for their fidelity and completeness. Diphtheria and its treatment with antitoxin was at that time the one subject that dominated all other discussions at the Orleans Parish Medical Society, and Dr. McShane's reports which appeared in the *Journal* at the time, are a fair example of his extraordinary reportorial ability. And yet he took but few notes, only headings; the rest he did from memory and with a detail that was amazing to those who had listened or participated in the animated and intricate debates that held us for many long hours at the meeting place.

As demonstrator of anatomy during the ten years that he was assistant to the writer in teaching the dissecting classes in the old building on Common street,— which is now occupied by the Tulane and Crescent Theaters—his exceptional capacity for acquiring and storing knowledge was also characteristically displayed.

When he first came to the dissecting room he was so thoroughly prepared and "loaded" with the knowledge that he had acquired by arduous preparation, that in going over a dissection his recapitulation of the anatomy of the parts sounded like a perfect barrage fired in a series of quick volleys with so much profusion and detail that the students held their breath in sheer amazement at his extraordinary accomplishments. To them he was a ambulant, living "Gray." It was only after a longer experience that he learned to curb his impetuosity and to retail his large stock of information in smaller quantities so that the students might digest and absorb them. He always spoke in short, quick, staccato sentences; all pithy and with definite meaning. When he delivered his messages to the students he spoke fast and copiously, not through any pedantic desire to impress his audience with his learning, but merely that he was all aquiver with the very exuberance of his knowledge. His absolute honesty, which would never allow him to evade a diffi-

cult question with a "bluff", or with subterfuge (not an unknown refuge to embarassed teachers) led him to immediately investigate any doubtful question with the aid of all the authorities that he could put his hand on. His gentleness and patience in helping men over difficult pieces of work, together with his ready wit and genial good fellowship, won the universal affection and respect of the student body. It was during these nearly ten years of almost daily contact, during the winter sessions of the Medical School, when Dr. McShane was associated with the writer in the teaching of practical anatomy on the cadaver that he had ample opportunity to become intimately acquainted with him and to appreciate his many lovable qualities. We would work with the classes from 7 p. m. to 10 p. m. every night, except Saturdays. At the close of the exercises we would wander out together for a refreshing stroll, usually stopping at some neighboring restaurant for a light supper, where we enjoyed the greatest relaxation after the hard work of the evening in our talks over the coffee cup. And I say coffee cup advisedly for while "Mac", as he was affectionately called by his nearest friends, was a good eater, he was not a drinker; in fact when it comes to spirits, he was sobriety itself. We were both young, enthusiastic and thoroughly in love with our work. His unfailing cheerfulness, optimism and good humor were contagious and with a liberal sprinkling of his Irish wit no other stimulant was needed to give zest to the amenities of the evening. There was no end to the variety of topics that we discussed, but his hereditary love of Ireland showed itself in his frequent excursions into Irish history and in his quotations from the Gaelic literature, in which he revelled with the fervor of an impassioned devotee.

We often parted at midnight and more than once had to be politely reminded that it was time to close the shop, before we parted. The delightful comradeship of those early days remains a treasured memory. The chill and the frost of ten gray winters is forgotten and only the warmth of the glow of that loyal friendship which sprang by the fireside of our mutual sympathies and aspirations endures as bright and sweet as the sunlit morning of a Southern Spring Day.

As time went on, Dr McShane's numerous and constantly increasing activities kept his sensitive and responsive brain in a state of sleepless tension and this together with the financial disabilities which logically followed in the prodigal abuse of his physical and mental energies in the pursuit of his endless charities, led to a neurasthenic "breakdown," which threw him into a state of invalidism. This threatened his usefulness for many long, weary years, and compelled him to resign from the official positions which he had filled with great efficiency and distinction. Thanks to the faithful nursing and loving care of his devoted wife he was restored sufficiently in health to partially resume the practice of his specialty and to teach in 1915 and subsequently, in the laboratory of hygiene and tropical medicine, at the medical school.

Unfortunately, just as the dawn of a new day had brightened his hopes and of those dearest to him, with a promise of a clear and cloudless sky, he was stricken in 1918 with a grippal endocarditis which permanently crippled his heart and blasted the hope of his friends for a return to his former activities. For five years he was conscious of the great uncertainty that hung over his fate, but in spite of the constant forebodings of an approaching end he bore his sufferings and trials with his accustomed cheerfulness and optimism. The end came suddenly, but not unexpectedly, in an attack of angina in the early hours of the morning of Friday, September 15th.

"He had been comrade long;
We fain would hold him still;
But, though our will be strong,
There is a stronger Will."

"Beyond the solemn night
He will find morning-dream,
The Summer's kindly light
Beyond the snow's chill gleam."

RUDOLPH MATAS.

CICATRICIAL STENOSIS OF ESOPHAGUS FOLLOWING SWALLOWING OF CAUSTIC ACID.

BY WILLIAM BEVERLY WHITE, M.D.,
SHREVEPORT, LA.

During the past few years there has been considerable agitation on this subject fostered by a few physicians who are interested in this line of work, but due to a lack of adequate co-operation on part of the profession, very little has been acutally accomplished. At the last meeting of the A. M. A. a committee reported on an investigation as to probable lye legislation, and advocated in their report "publicity"; in other words: bring this subject to the people appraise them of the everlurking danger of various "concentrated lye", and show them the sequallae and fatal results which follow the ingestion of caustic alkali.

We know that concentrated lye contains about 94 per cent sodium hydroxide, a most destructive corrosive. Various cleansers contain from 8 to 50 per cent of caustic alkali. Powerful alkali can be purchased at any grocery store and the label on the package may not give any warning of its poisonous contents, but if perchance it does, it is so placed that it does not impress the purchaser of its dangerous contents. Just read some of the labels: "will not injure the most delicate fabrics", "will not injure the hands."

How many times utensils are used to measure and dissolve the powders, then carelesly left about the house without rinsing. The contents are swallowed by mistake for water or milk. Or they may be left within reach of children who pick up the tin and drink some of the contents. These are not theoretical conditions, but actual cases as are exemplified in the case reports.

The children of the poorer class are the unfortunate sufferers in nearly all of these cases, inasmuch as families have these lye compounds around for cleaning purposes or making of soap; not knowing the dangerousness of the contents, cans are left around the house within easy reach of children. Less of these accidents would happen if they were conspicuously labled—"POISON".

The druggist cannot dispense a poison without placing a prominent label on same, but the lye preparations with their inadequate labels are found in the kitchen openly inviting calamity.

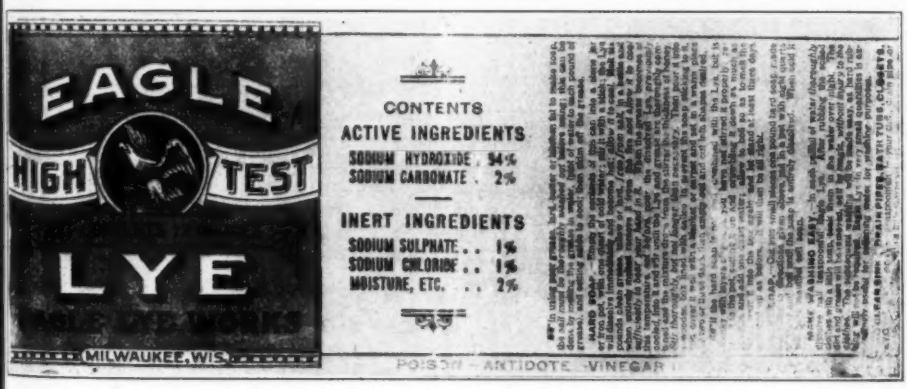


Fig. 1.—Note placing of the Inadequate Poison Label.

The most prominent men in this line of work have exercised their agencies with the packers as to proper labeling, but it came to naught. Manufacturers of cleansers or concentrated lye preparations claim their preparations are harmless, therefore do not need any warning, but the data on this subject shows that the committee sent out 1,448 inquiries to esophascopists and surgeons and obtained from them report of 490 cases. Continuing along this same line of reasoning, if you consider that but 1 per cent of the medical profession was reached, it is immediately

apparent how frequently this calamity actually happens.

Another difficulty which prevents legislative action is due to the interpretation of "poison" in the laws at present in force. Here in Louisiana the statute states: all poisons must be labeled with skull and crossbones, but the crux of the situation is—what is a "poison?"

The Pennsylvania statute defines "poison", as any substances which will cause death when used in quantities of 60 grains or less, and this has been suggested as lethal dose.

The suggestion that the public be appraised of the ill results of these various compounds, will in due time cause the people to press their legislature to have the necessary laws made to protect their welfare.

The symptoms of these distressing conditions are very apparent. Have the usual history of swallowing concentrated lye. In the first stage have acute symptoms, as dysphagia, regurgitation.

Swelling and sloughing of the mucous membrane, as these ulcerated surfaces heal cicatricial tissue forms which as it contracts varying degree of stenosis results; the loss of weight varies with degree of obstruction. The esophagitis which follows in the wake of some of these conditions, is due to stagnation and fermentation of food in the esophagus. May have considerable swelling, thereby adding more difficulty to the already small lumen stricture. It may be imperative to perform a gastrostomy, thereby putting the esophogus at rest, dilation being resumed in a few days.

The prognosis depends on the calibre of the stricture. In small lumen and untreated the mortality is very high, but much can be offered as to ultimate restoring of the esophageal wall to a functioning organ, if same is treated early before extensive fibrous changes manifest themselves.

In the treatment, blind methods of dilation should be discarded for the more accurate esophagoscopial dilation, as per method of Jackson.

The following cases will serve to emphasize the seriousness of this situation, which we are endeavoring to impress upon the medical profession:

Case 1, H. A. (col) age 2 yrs.—On the day previous to patient's being brought to the hospital, mother was doing the family washing and left a can of **Rex Concentrated Lye** on a chair. The patient reached and obtained the can of lye and before the mother could get same away from it, had put the can to its mouth and drank some of the contents. On admittance, mouth, tongue, and pharynx were very red, swoolen and bleeding at places. Patient experienced great pain. Very restless. T. 100, 6, P. 20, R. 24. The parents of the child took him home on third day against advice of authorities.

This case shows the acute symptoms of these cases. If this child was fortunate enough **not to have swallowed** any of this substance, then we may expect no further trouble; but, **if he did**, he will sooner or later fall in a category of the previously mentioned **cases.**

Fig. 2.—Case 2.

Case 2, O. W. age 20 months.—About four months ago swallowed some **Eagle Lye.** Usual symptoms following this, later sent to a distant city for treatment. Returned home after a sojourn of one month, as improved. During last two weeks patient had more or less regurgitation of liquid diet, but has not taken and retained any nourishment or liquid for about **48 hours.**

Endeavored to pass bougie but unable to do so. Patient given water per rectum for ten hours to assist in relieving the water hunger. Gastrostomy performed about 60 hours after last nourishment was taken.

Following usual treatment of dilation, we have been able to get No. 20 French through stricture. Nourishment per orum.

Case 3, M. B. (col) age 4 years.—Patient accidentally swallowed lye about 8 months ago. Usual symptoms of stricture of esophagus followed.

X-ray report.—Slight collection of barium at level with upper part of sternum. Passage to stomach free. Esophagus clear 30 seconds.

Notes—Vomiting daily. Unable to retain solid food, at times unable to retain fluids. On examination noted just about at aorta crossing web-like adhesion extending from ant, right middle line directly back to posterior right border of esophagus. Same was pouch-like in formation. At this seance we were able to get a No. 9 through with difficulty. Patient had relief from vomiting for several days. Dilatation was repeated in five days. Gradually increased in size until inserted No. 14. Vomiting lessened. Dilated again using No. 14. Patient has increased in weight during the months stay at the hospital, and is improved, but not cured. Left hospital to return at later date.

Case 4, J. H. (158218) age 5 years.—Three years ago accidentally swallowed some lye. Usual symptoms followed. Vomited at intervals. Following eating, complains of something in throat. Puts fingers to back of tongue, point of inconvenience has suffered but little from malnutrition due to this condition.

X-ray Report.—Fluoroscope and plate show a marked irregularity in the esophagus in upper retro cardiac with only a slight stoppage of barium at cardiac. Stenosis very incomplete.

Examination. — Esophagoscopic met obstruction at crico—pharylgeal constriction, with a decided narrowing of lumen about 1-8 inch in diameter. Usual dilatation, (twice to date). Decided improvement. Patient is on semi-liquid diet and has not vomited in ten days. Patient removed from institution by parents and has not returned for treatment.

Case 5, A. B. age 12 years.—Eleven months previous to entrance to hospital, patient, while reaching up to shelf, accidentally spilt can of lye on himself, and having mouth open at time swallowed some of the lye—**Eagle Lye.**

Had usual symptoms following this. After acute symptoms subsided, he was able to swallow fine granulated foods and liquids, but for last few months he has been having more difficulty in retaining his food. At times fluids will pass through the stricture; at other times will not. He will then regurgitate his food.

On admittance, (sent in as T. B. patient), patient who is 12 years old was so emaciated and weak he was unable to stand without assistance. He was put in bed, water and nourishment given per rectum. Reacted favorably, He was unable to retain any nourishment per orum. Decided to have a gastrostomy performed.

X-ray 7587.—Stricture of Esophagus on level with 4th rib. With Dilatation above this point, another stricture lower down with dilatation, very small amount barium entering stomach. Patient was put on a forced diet and in two weeks there was a decided change. Usual esophagus examination, and noted a stricture just above the crossing of the aorta, and dilation and second stricture above the crossing bronchus, which occluded the esophagus. Usual treatment by filiform was instituted—treated once or twice per week for six weeks.

He increased in weight and strength markedly, and when last seen the gastrostomy was removed, as patient was able to take fluids and semi-solid food in usual manner. He left the hospital while I was out of the city last summer, but was instructed to return for further treatments. Mother informed us he was sent to a distant city, and is continuing under the usual treatment and is progressing satisfactorily.

Fig. 3.—Case 6.

Case 6, M. J. age 10 years.—Noticed a glass containing a milk-like substance. He drank some of it, thinking it was milk. This was **concentrated lye.** Had usual symptoms following the ingestion of this fluid. Finally came to the hospital six months later. He was emaciated, weak and unable to retain semi-solids or fluids. Due to the extreme condition of the patient, it was necessary to perform a gastrostomy in order to sustain him. During the next two weeks on a regulated diet. Patient improved considerably in physical condition.

X-Ray Report. Complete stenosis about 6th dorsal. Very large dilation above extending to the cervical region.

Esophageal Examination. Noted Stenosis. About able to insert No. 1 French through with difficulty at following seances. Finally got No. 4 through, but stricture did not maintain the forced lumen. Upon resumption of treatment at later date, noted a marked enlargement of esophagus (dilatation) and unable to find any place in the stenosis which would warrant undue pressure to force an opening. Upon further examination several times, find conditions as previously mentioned, that is—absolute stenosis. Now endeavoring to use the retrograde method, (i. e., through gastrostomy opening), but so far unsuccessful in obtaining opening.

While this appears like a hopeless case, we are not abandoning all hope, regardless of the fact that he has been obtaining all his nourishment through gastrostomy tube for one year.

Conclusions—All these cases have come under the observation of the writer during the last nine months. Since presenting these cases, three (3) more cases have been reported. You can readily comprehend, if all the cases in the state were reported, the immense number of these sad conditions we have around us.

Some of these cases can be improved markedly, but at the best, these children are crippled for life. We, therefore, owe it to the community at large, that proper means be taken to protect them.

Let us have the necessary legislation.

ARTHROPLASTY.*

By Hermann B. Gessner, A.M., M.D., F.A.C.S., New Orleans.

A contribution from the Surgical Department of the Tulane School of Medicine.

In this paper it is my purpose to report the cases of arthroplasty that have been under my care, with special reference to the technique and the end results. I shall depart from this purpose only to say that of the surgeons of our generation the one who most merited our gratitude for the development of arthroplasty was the late John B. Murphy of Chicago.

Case 1. Elbow Arthroplasty.—E. M., white female, 25 years old, came under observation Oct. 14, 1907. July 14, 1905, she had been shot in the right elbow; ankylosis followed. In 1907, over a period of six months, there had been as many attempts at passive motion under general anesthesia, without any improvement. There was almost complete extension of the elbow, with absolutely no range of motion; pronation was good, supination very limited. Skiagram showed an old fracture of the olecranon process, with a firm fibrous ankylosis. Oct. 17th., under general anesthesia I did a complete excision of the joint, leaving a gap of 1 1-2 inches. The incision was the posterior median. No soft parts were interposed. Passive motion was begun at the end of ten days. Long disuse of the flexor and extensor muscles (over two years) had resulted in considerable atrophy, so that recovery of function was slow; electric stimulation was used to promote this. (It is well before doing an arthroplasty to test the muscles electrically to make sure that they are capable of development. It is possible that after many years muscles may be so far atrophied as to offer no hope of adequate recovery.) In this case the end result has been an excellent functioning joint.

According to a report from a relative, received in Feb., 1923, 15 years after operation, the limb is still a very useful one.

Case 2. Elbow Arthroplasty.— H. M. D., White Male, 21 years old. A gonorrhea contracted 4 1-2 months previously had been complicated with a severe arthritis of the right elbow. Mixed vaccines, baking, passive hyperemia had failed to give relief; finally the joint had been opened and curetted; the infection was cured, healing followed, but the patient was left with an elbow ankylosed in the right-angled position, having about ten degrees of motion. He was operated on Sept. 14, 1912 at Touro Infirmary; posterior median incision; humerus left intact, olecranon and radial head removed. A pedunculated fatty fascia flap was used to cover the sawn bones; it was tacked in place with plain catgut. I was able to follow the case for two years after operation. At that time extension was complete; flexion was good enough to permit the patient to place his thumb between the shoulderblades; he was employed as a chauffeur. April 24th, 1923, after ten years, I received the following telegraphic answer to an inquiry "Entirely satisfactory; fine range of action; slightly weaker than before operation."

Case 3. Jaw Arthroplasty.—C. G., white, female, aged 13 years, was admitted to the Charity Hospital, February 1, 1916. She presented a considerable degree of ankylosis of the jaw. In fig. 1 it can be seen that her teeth overlapped instead of presenting an interval. The etiology apeared to have been an abscess about the jaw, cause unknown, for which an incision had been made along the ramus some 9 years previously. As the left side showed some motion, the right was selected for arthroplasty. Incision made along zygoma and from the outer end down vertically. The temporal and the mandible (condyle) were so thoroughly

*Read before the Louisiana State Medical Society, April 24-26, 1923.

fused as to be continuous like one bone, with no cleavage line distinguishable. Sufficient bone was removed with Gigli saw and rongeur to permit the interposition of a finger. Toward the end of the operation the internal maxillary vessels were torn with a so-called blunt hook; the external carotid artery was tied and the wound packed with gauze to control the maxillary vein. Four days later the pack was removed, a fatty fascia flap turned in and tacked along the edges with plain catgut. Recovery followed with an excellent result as shown by fig. 2. A letter from her physician, dated Dec. 1922, reports the mouth in excellent functional condition nearly 7 years after operation.

Case 4. Hip Arthroplasty.—B. A., white male aged 22 years. There was complete ankylosis of the right hip, with flexion to about 135 per cent with the trunk. Etiology lay in an attack of typhoid fever 5 years previously, during which infection developed about the joint. Incision had been resorted to several times and small bits of necrotic bone had been removed. Operation at Touro Infirmary Oct. 15, 1919. The steps of the technique as outlined by Murphy were followed out. A large U shaped flap was marked out, base up, convexity down. When it came to separating the skin and subcutaneous fascia from the tensor fascia latae the latter was found extremely atrophic and scarcely distinguishable. The writer intentionally erred in the direction of favoring the deep layer, on which he depended for mobilization of the joint. The result was that a considerable portion of the thin skin flap sloughed. The femoral head was chiseled away from the acetabulum with a curved chisel, after sawing of the tip of the great trochanter with a Gigli saw for exposure of the joint area. When the bony surfaces had been shaped, the tensor flap was placed in position and tacked with plain catgut. Recovery was uneventful except for the skin flap slough above referred to. In a letter dated Jan. 1923, about 3 1-4 years after operation, the patient reports in detail on present function. He can now do a hard day's work on his cotton farm; can dance, which was impossible before. The motions at present observed are adduction and abduction, and rotation inward and outward, both of these being limited, to a few degrees. It is said that arthroplasty of the lower extremity is apt to give motion of a temporary character, weight bearing on the affected joints causing a return of the ankylosis. I am hopeful that the degree of motion now present 3 years after operation will continue to be observed. The restricted motion I attribute in some measure to the fact that the outline of the head and socket secured by me was oval rather than spherical; perhaps the thin and unsatisfactory cushion provided by the tensor fascia latae contributed to this limitation. It should be added that much of the improvement in this case is due to correction of the flexion deformity.

Case 5. Jaw Arthroplasty; 2 Elbow Arthroplasties.—A. A. white female, aged 31 years, when seen in Aug. 1920, gave an unusual history of joint pathology. In June, 1906, at the age of 17 years, she fell ill with typhoid attack, which with relapses lasted 3 months. At the end of that time she had a greater or less degree of ankylosis in practically every joint in the body. When admitted to the Touro Infirmary Aug. 24, 1920, her principal trouble was with the ankylosis of the jaws, which not only made eating difficult, but also interfered with the extraction of some painful carious teeth. Finding quite a degree of motion in the left temporo-maxillary joint, I proceeded to mobilize the right. This was done Sept. 17, 1920, using one half per cent novocain for infiltration. I found the temporal fused with the mandibular condyle, but the outline of the joint preserved. The incision, begun as the typical transverse cut along the zygoma with a limb running vertically down in front of the ear, was modified by adding a vertical cut above the zygoma. Chisel and mallet were used to remove enough bone to permit the width of my index finger to be interposed. A pedunculated fatty fascia flap was turned down between the bone surfaces and tacked along the edges with plain catgut. Recovery was uneventful except for a partial paralysis of the orbicularis palpebrarum which has disappeared in the course of time. The functional result has been very satisfactory. The patient before long was able to do two things that previously had been impossible: stick out her tongue, and chew gum. In Jan. 1923, she was able to have a number of carious teeth extracted under gas anesthesia. The space between the jaws has increased slightly in the two and a half years since operation.

Nov. 29, 1920, I did an arthroplasty of the left elbow following the technique of Case 2, except that the skin incision marked out a rectangular flap. The anesthesia used was infiltration with one half per cent novocain, following an unsuccessful attempt at brachial plexus anesthesia with two per cent novocain. The ankylosis was bony, the bones markedly porotic. As this was her writing limb, and the muscles very weak, I did a very economical resection, for fear of a flail limb. The

result has been only a moderate range of motion, about 15 degrees, but a much more useful limb. July 25, 1922, I mobilized the right elbow, removing a large block of fused bone, about 2 1-2 inches in length, with brachial plexus anesthesia (10 c. c. of 2 per cent novocain with 4 gtt. of 1-1000 adrenalin to the fl. oz.) A triceps flap was substituted for the fatty fascia of the previous operation. A good result was obtained in this case, with a wide range of passive motion and greatly increased usefulness, though active motion is limited by muscular weakness.

Case 6. Partial Arthroplasty of the Elbow.—E. C., white female, aged 40, suffered a fracture of the tip of the olecranon Aug. 10, 1922. Non-operative treatment by extension and passive motion resulted in fibrous union with limitation of motion to between 90 degrees and 135 degrees, Jan., 1923, I removed the tip of the olecranon and turned in a flap of fatty fascia, using a rectangular skin incision; the humero-radial joint was not disturbed. The result has been an increased range of motion, extension being still at 135 per cent, while flexion goes up to about 45 per cent. In this case I observed for the first time the pain on motion which is reported by some authors as due to pinching of the fascial flap between the bone surfaces.

Case 7. Knee Arthroplasty.—I have only incomplete data of this case. The patient was a negro male,, aged about 17 years, who had had a compound fracture of the femur extending into the knee joint. There was severe infection with a final fibrous ankylosis; considerable scarring of the adjacent skin had resulted from repeated incisions. Operation at the Charity Hospital consisted in dividing the fibrous bands and interposing a fascia lata free transplant, following the technique advocated by McAusland of Boston. The skin closure was unsatisfactory, there was saprophytic infection, the transplant was lost. However the patient, who cannot now be traced, left the service with a slight degree of motion, about 10 degrees, which made his limb much more serviceable. In this connection it is interesting to recall that some writers believe a free transplant survives only a short time, serving to keep the bony surfaces apart while surface cicatrization is accomplished.

Comment:—It will thus be seen that my experience covers 9 arthroplasties in 7 patients, 4 complete and 1 partial elbow arthroplasties, 2 of the jaw and one each of the hip and knee. The etiology of the ankylosis was typhoid fever in two, joint fracture in two, abscess, gonorrhea and gunshot wound in one each. The technique employed was that utilizing a pedunculated fascia flap in six cases, a pedunculated musculo-aponeurotic flap in one, a free fascia transplant in one, and in one no soft tissue interposition. Since I did the second jaw operation a technique without soft tissue interposition has been recommended for this joint; I have had no occasion to apply this. The results may be summed up by saying that of the 9 operations 5 have given excellent results (two jaws and 3 elbows), one a good result (elbow) and three have shown enough improvement to justify the surgical intervention (hip, knee, elbow). There was no mortality.

In conclusion I may say that the mobilization of an ankylosed joint is one of the non-life-saving operations that make life much more attractive to the patient and win his gratitude if he has any in his psychic make-up.

DISCUSSION.

Dr. J. M. Batchelor (New Orleans): It is not necessary, for the purposes of this discussion, to consider lines of incision or anatomic descriptions, because these operations are now classics and have their place in surgery. It seems to me this discussion now should have for its object a consideration of certain essentials necessary in order to insure the result that the surgeon contemplates. In the first place, the consideration of the joint involved. We know that the joints that give the most gratifying results are the non-weight bearing joints— the joints of the arm, the elbow, the shoulder, and also the temporal maxillary joint. When confronted with an ankylosed joint the question naturally arises as to whether it were better to endeavor to create a mobile joint, or to accept the condition as presented. If the joint be found to be ankylosed in position, particularly a weight-bearing joint, that does not interfere with the usefulness of that member, it is frequently preferable to allow the condition to persist. However, if the joint is ankylosed in a position that interferes with usefulness, then there are certain considerations. In the first place, the musculature. It would be obviously unwise to attempt arthroplasty for a joint which would not be controlled by the muscles after a good joint was secured.

In the second place, the selection of material to be interposed. Numerous tissues have been used, perferably a tissue such as fascia or periosteum, as more adapted to such an operation.

But the success of the operation depends upon the thoroughness with which it is done at the time. Certain things must be secured at the time of operation. In the first place, the proper thickness of flap. If the flap be too thin, if pressure be continued, if there be muscle pulling or insufficient correction of shortening, then we may expect necrosis of the flap and failure of operation. After the completion of the operation, feeling perfectly sure that asepsis has been maintained—which is absolutely essential—then comes the question as to the time for future treatment, the time at which to institute passive motion, and as much depends upon the continuance of motion as upon anything that may be done in the way of arthroplasty. If after a certain length of time, usually thirteen days to two weeks, passive motion be instituted, and if for any reason it is discontinued you may be sure the operation will be a failure. This motion must be continued constantly and for a considerable length of time. Baking and the usual routine treatment to restore the function of any muscle or joint would be the completion of the treatment.

Dr. Paul A. McIlhenny (New Orleans):—Personally, I am not an advocate of arthro-

plasty in general. One factor that we must absolutely consider before even attempting to advise a patient in regard to arthroplasty in this: Arthroplasty demands special treatment and prolonged treatment. Primarily we have to consider the patient's ability to take that treatment. The patient must either be so poor that he must go into a Charity Hospital, or be so rich that he can go into a private institution for an almost unlimited time. Intermediate cases are not subjects for arthroplasty.

Arthroplasty in non-weight bearing joints gives almost universally good results, no matter what method you use, and, in many cases, no matter how little post operative treatment they receive. Arthroplasty in weight-bearing joints, in the majority of cases, does not give good results. Five years or less after operation trouble begins. In most cases they come back with either an ankylosis or a deformed position of the joint, the joint is not sufficiently stable to allow them to do any amount of hard work, or it has become painful again.

Personally, I believe in hip cases in the excision of the head, and the placing of the neck in the acetabulum instead of attempting a true arthroplasty with re-shaped head. At the knee, various operations have been devised calculated to give a stable joint. Few are thoroughly satisfactory. If you have a deformity, correct it and give the person a good weight-bearing, non-painful, stiff joint, and you will have greater satisfaction than if you produced a mobile joint which is possibly painful and at best not stable.

Dr. J. T. O'Ferrall (New Orleans):—I hesitate to discuss this paper because my opinion differs considerably from some of the discussants. I have to report about twelve cases where I did arthroplasty on various joints, and those giving the best results were arthroplasties of the knee, a weightbearing joint. Where I have done an arthroplasty on non-weight bearing joints it has been universally unsatisfactory—a somewhat diametrically opposed opinion to some of those who have discussed the paper. I have as a support in this contention, V. Putti of Bologna, Italy, who has probably done more arthroplasties of the knee joint than any other man. Two years ago he reported at the American Orthopedic Association 110 cases of arthroplasty of the knees, and showed moving pictures. None had less than 100° of very active motion. Campbell, of Memphis, has done 50 cases of the knee, and none have less than 90° of motion. Putti's technique, has been recently described by Lovett of Boston and Jones of Liverpool in their new book. He uses a free graft of fascia. This fascia in the five cases I have done, after six months has not been lost in any case. However, one has had slight infection and therefore some sloughing of the skin. McCausland of Boston has reported 70 cases of the elbow, all of which have been satisfactory.

One or two points in regard to the after treatment seem to me to be important, and one is the early motion. I think that is one of the most important things that can be done. In arthroplasties of knee I have followed Putti's advice and have begun motion at the end of the first week. This motion is effected by the patient himself rather than having some person who cannot feel the effect of the motion in the joint. This applies also to the elbow. It should be done early and should not be done by a second party. It should be done by the patient himself.

Dr. E. Denegre Martin (New Orleans):—The report of Doctor O'Farrall surprises me. What I want to know is how long it has been since these patients were operated upon. My personal experience is that they do well for six months, and then the ligaments contract about the joint, the motion is limited, and in many cases there is ankylosis. I wish he would show us these cases. It would be a wonderful demonstration.

Dr. O'Farrall:—Doctor Putti's oldest cases are about 5 years. The oldest case I have is two years. One is a girl who is working in my office, and I will send her to Doctor Martin's office tomorrow. She has 110° motion and walks without the least difficulty.

Dr. Hermann B. Gessner (closing): I had Doctor Parham in consultation in the case of the hip arthroplasty. I hesitated about doing it, but after seeing the case with me he approved of my making the attempt.

I may say that I have used early passive motion and active motion in all my cases. In the case of hip arthroplasty I made some traction on the femur to keep from having pressure on the flap. It is a good thing in those cases to prevent early pressure between the bones on the fascial transplant.

STATUS OF CERTAIN CARDIO VASCULAR CONDITIONS WITH TREATMENT ILLUSTRATED.

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The writing of this paper has been prompted by the occurrence in my private practice of an unusual number of cases of Aortitis and Aneurysm that had been diagnosed as simple cases of heart disease, cardio, renal syndrome, arterio-sclerosis, or not diagnosed at all.

A large number of these cases had been through the hands of competent throat specialists, who treated their intractable coughs and hoarseness with local application to the vocal cords, or sprays, cough mixtures, etc. Some of these cases had never been examined, except with a head mirror. There were nineteen of these cases coming under my observation during the year 1922.

One of those cases was sent to Cov-

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ington with a diagnosis of tubercular-laringitis, when in reality he had a recurrent laryngeal paralysis, the result of an aneurysm. See Case 405.

There is nothing that I have done in diagnosing these cases correctly for the first time that could not have been done by any competent man who would have taken the time and trouble to make a careful and complete physical examination and had done an irreducible minimum of clinical laboratory work.

This irreducible minimum is a complete blood picture, total red, total white, and differential count, examination for plasmodia thermoglobin and color index. Blood Chemical work where indicated. Blood Wasserman, and if necessary spinal fluid examination, sputum, urine and Feces examination, fluroscopic examination of chest and six (6) foot radiograph (teleroentgenogram). Radiographs for focal inspection of teeth and head, when indicated.

It is my invariable custom to make my history, complete physical examination and tentative diagnosis in writing before sending patient to the laboratories, because I desire to keep "on my toes, as it were"; to keep myself from becoming lazy and dependent to too great an extent upon the clinical laboratory means at hand, particularly the X-Ray, and besides I enjoy the interest and excitement of the check. I am so fortunately situated that it is not necessary for me to have the patient leave the Clinic building to have any of this work done.

I have made a number of Basal Metabolic readings on about eight (8) of these cases and have found them to be normal. Syphilis doesn't seem to influence the Basal Metabolic rate per se.

Of the 19 cases—

14 gave a positive Wasserman.

10 positively denied all venereal infection.

9 admitted previous infection and treatment more or less intense for syphilis.

The systolic blood pressure ranged from 165 to 250.

The diastolic blood pressure ranged from 100 to 130.

The pulse pressure averaging considerably higher than normal.

7 had no apparent kidney involvement.

5 had definite nephritis with Albuminiuria.

7 had definite nephritis without albuminiuria.

2 had no murmurs.

6 Mitral murmurs only.

2 Aortic murmurs only.

9 had two or more murmurs or a multiplicity of them.

4 only gave an aneurysmal bruit.

The treatment consisted in all of these cases of two (2) phases, of course, necessarily to a degree interdependent and correlated, but pursued each, more or less, as a separate concept and entity, and each administered as the demands of the case indicated; and they were:

First—General.

Regulation of work and rest, diet, fluid and salt intake. The administration of drugs, such as Digitalis, Morphia, Alkalies and Purgatives, as needed.

Second—

The antisyphilitic treatment which consisted of, in all cases, the intravenous administration of one or more courses of Neo-Salvarsan. Each dose, for six doses, being given one week apart with a rest period, between courses, of from four to eight weeks, with breaks in the series, if the kidneys did not stand the strain.

The first dose was .15 gm.; 2nd, .30 gm.; 3rd, .45 gm.; 4th, .6 gm.; 5th, .75 gm.; 6th, 9 gm., at the conclusion of these series, Mercury by inunction and Iodide of Soda was given by mouth. Sometime mixed treatment was given by mouth.

Naturally the closest watch was kept upon the urine and kidney function.

Pain in the chest usually developed after the Neo-Salvarsan injections, probably a focal reaction, the so-called Herxheimer reaction. I regard this reaction as an indication that the drug is having its proper effect on the structures specially hoped to be reached.

All of these treatments, except in two cases, were given in my office. I have only time to show you a few of the X-ray films and slides and a method of graphically and accurately visualizing what is the actual condition of the heart and large blood vessels devised by my-

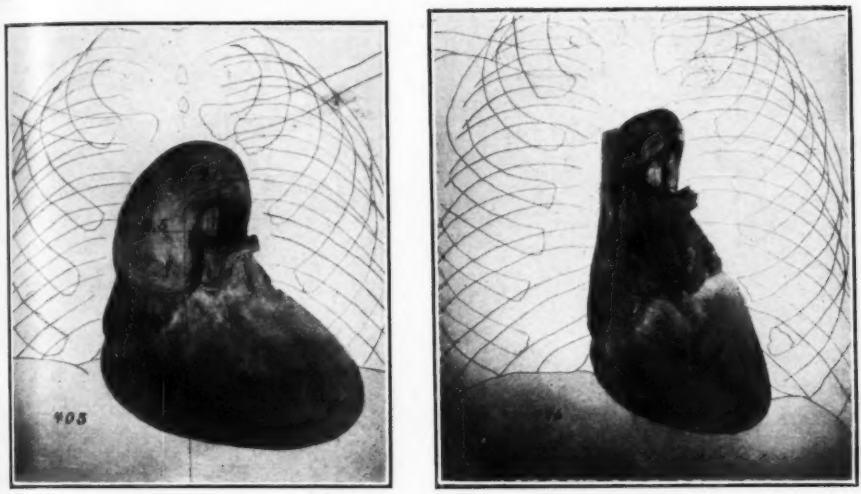

Fig. 1.—(Right) Case 405. Aneurism with paralysis of recurrent-laryngeal nerve. Treated for tuberculous laryngitis. Sent to Covington, La. Has four plus Wasserman, also cardiac decompensation with attacks of angina-pectoris, during one of which he died. There was a whispering voice and constant difficulty of breathing. (Left) Case 496 Normal.

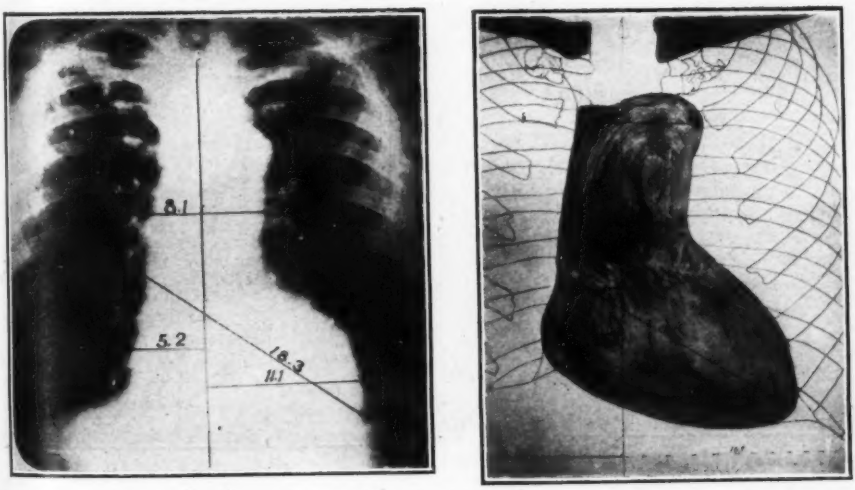

Fig. 2. Case 781. Aneurism. Had been treated for nephritis and arterio-sclerosis only. 8 per cent albumin, many casts. B. P. 220-130. Four plus Wasserman. Improved B. P. 170-190.

Fig. 3. Case 483. Aneurism. Treated for severe cough. Had nephritis with albuminuria. Four plus Wasserman

Fig. 4. Case 25. Aneurism. Case treated for two years for laryngitis and attacks of hoarseness. No nephritis. Four plus Wasserman. Wife gave history of repeated abortions. She also has a four plus Wasserman. No children. This man was a railway local express and freight agent, lifting bags of pecans, coffee, sugar, etc.

self, Dr. Nicolle and Mr. J. H. Farpuhar. They will suffice to demonstrate the condition, and the value of this method of study and observation.

Case Number	Aortic Notch	Aorta	Medium Right	Medium Left	Longitudinal Diameter
Normal	4.5	4.5	3.25	7.4	12.5
405	4.1—.4	8.5+4.	4.6+1.35	13.4+6.	18.4+5.9
*496	3.7	5.0			
781	5.1+.6	8.1+3.6	5.5+1.25	11.2 3.8	17.0+4.5
483	4.9+.4	10.4+5.9	2.9	8.7	12.5
25	**	11.8+7.3	5.2+2	11.1+3.7	17.3+4.8
305	4.6+.1	8.0+3.5	4.6+23.	10.8+3.4	18.9+6.4
842	4.4—.1	7.5+3.	4.5+1.25	8.6+1.2	14.0+1.5
609	4.5—	8.0+3.5	4.9+1.65	10.0+2.6	15.4+2.9
756	4.7+.2	6.8+2.3	6.0+2.75	10.9+3.5	16.5+4.0
439	4.4—.1	9.0+4.5	4.1+ .85	10.9+3.5	16.0+3.5
595	4.5—	7.9+3.4	6.4+3.15	11.5+4.1	19.0+6.5
65 }			26″ T. P. D.		
42 }					

*Normal
**Aortic Notch—obliterated

In reference to the above measurements it may be well to say that the normal heart size has been determined in a large number of healthy individuals, from which Bardeen and others have formulated standard tables, covering averages for weight, height, sex, age.

In the examination of the recorded findings in these cases, type of build plays a very important part. For instance the type of heart found in the fat chunky man would be abnormal in the long lean fellow, just as the type of heart found in the long lean fellow would be abnormal in the fat chunky one.

The normal heart shown above is that of an active man of 35, weighing 135 pounds, and 5 feet 7 inches, whose measurements almost correspond to those given on page 413. Figures 188 and 189. United States Army X-Ray Manual. 1919.

Conclusions:

1st—Aneurism of the Aorta and Aortitis is far more common than it is generally believed to be.

2nd.—That the teleroentgenogram is of the greatest importance in accurately keeping track of the progress of the case and in enabling the comparison of one case with another.

3rd.—Syphilis is the basic cause of this condition, certainly where there has been no traumatic injury to the blood vessels.

4th—Hope of relief and stoppage of progress in this disease rests upon the treatment of the syphilitic basis.

5th—No ill effects resulted from the graduated doses of Neo-Salvarsan administered intravenously.

6th—Very severe chest pains after Neo-Salvarsan administration may indicate a reduction of the size of the next dose.

7th—As Nephritis is frequently syphilitic in origin its presence has not deterred in the pursuit of this line of treatment. Of course under absolute observation.

8th—Full Anti-Syphilitic treatment other than Neo-Salvarsan is used in addition.

9th—No deaths have been attributable to the treatment; which has given more satisfactory results and the patients more comfort than any other plan yet followed.

DISCUSSION.

Dr. A. E. Fossier (New Orleans): The diagnosis of aortitis, enlargement of the aorta, aneurism is frequently very difficult to make. Errors are very common, and we must acknowledge that many such cases are found on the autopsy table that were not recognized ante mortem. And again many diagnoses were erroneously made of aortitis, etc., and the patient doomed by his doctor to an early death, who lived and are still living in robust health many years after the verdict was rendered. I have known men in their early forties who were advised to lessen their activities, and to abstain from all physical efforts, and even to retire from their business, who were normal in so far as their great blood vessels were concerned. They are living today without any sign or symptom of dilated aorta, aortitis and what not.

Now errors are frequently permissible, and the X-ray frequently leads us into a wrong diagnosis. It is an impossibility to determine

the size of the great blood vessels as well as any other organ in a definite way.

The size of the great blood vessels as well as of the heart depend upon the stature of the individual; and also in the aorta upon the age. These facts have been confirmed especially by the French, who predominate in this work, and I refer you to the works of Vaquez, Bordet, Lutembacher and Sorel.

Take the two types of men: first, those with large chests, short neck and with a high diaphragm, in them are found organs showing their bulk in the horizontal position. The horizontal diameter of the heart is widened, and rests more obliquely; the area of the great blood vessels is increased in its horizontal and decreased in its longitudinal diameter. In other type of mankind, the viscerpototics or those who have a long narrow elongated thorax and in whom the bulk of their organs appear in their logitudinal diameter instead of the horizontal, give a reverse picture compared to the other type. The area of great blood vessels is very much elongated in its longitudinal diameter and greatly reduced in its horizontal diameter, the heart is downward displaced and it is also elongated. The diaphragm is sagged, and this lessened support to the heart and its great blood vessels in the cause of the narrowing of their longitudinal diameter.

Considering the difference existing in the normal size of the area of great blood vessels and of the heart between the two types of individuals, it is an impossibility to make a diagnosis unless this all important factor is seriously considered.

An absolute dependence on the X-ray, and the making of a diagnosis by means of a rule, will very frequently mislead the doctor, unless all factors are considered.

Dr. J. E. Knighton (Shreveport): I shall confine my remarks to the question of aneurysm, as most of these cases deal with aneurysm.

Referring to the point brought out by the doctor that these cases had passed through the hands of numerous physicians without a diagnosis having been made—this simply brings home to us the old problem of more careful examination of our patients as a means leading to more accurate diagnosis. So many of us fall into the habit of running casually over patients, taking too much for granted, not giving them the serious, careful examination that every patient is entitled to.

It is not the throat specialist or any other particular line that fails to make a diagnosis of aneurysm. I recall a number of patients with aneurysm of the aorta in which there was not present the usual symptoms of pain. As a rule we look upon pain as being one of the most pronounced and constant symptoms of aneurysm of the aorta; but that is not always true. It is not always present to the extent that the attention of the patient would be attracted to it, and, as brought out in this paper, the bruit is not always present.

In the course of some work in the Charity Hospital at Shreveport we had occasion to observe a number of cases of aneurysm of the aorta in which the diagnosis was made only after X-ray examination had been made. In a majority of cases this is inexcusable, for the simple reason that examination had not been done carefully. But in a few cases it seems as though it might have been passed over by anyone, for the reason that after the X-ray examination is made you can check the patient over and it is hard to find any bruit, and it is hard on percussion to outline the enlargement, particularly in the absence of pain.

With reference to the treatment of this condition as suggested by the essayist, we have had occasion to observe cases in the same institution treated by means of neosalvarsan, under a line of procedure somewhat as suggested by Doctor Jones. I recall one or two cases in which the symptoms of cough, etc., were materially relieved under the administration of neosalvarsan. I believe we need not hesitate, particularly in aneurysm of the aorta where we have good reason to believe it is luetic in origin, to give them the usual antisyphilitic treatment.

Dr. J. Birney Guthrie (New Orleans): There are so many points in which I differ from the essayist that I hesitate about getting up to discuss the paper at all. For example, we see here a case that has been taken by the X-ray. I have had considerable experience in the examination of radiographs and in making radiographs, I have measured hundreds of aortas. I heard the essayist very distinctly say that the normal aorta is 4.5 cm in transverse diameter, which is untrue. The normal aorta in a white man is over 7 cm, and a range of 1 cm is of no significance at all. He showed one that measured 8.5, and that is within the normal range of dilatation. An aorta spread of 8.5 should not be called an aneurysm. Aorta dilatation is not necessarily an aneurysm.

As regards the giving of salvarsan in all cases of aortitis, I do not believe we are justified in that course. There are other causes of aneurysm than syphilis that would produce changes which might lead to aneurysm. I think we are going too far to treat them all as syphilitics, although a large percentage are certainly of syphilitic origin.

Again, the matter of giving small doses is one which not only immunizes the patient but the infecting treperulurata as well.

The only method of using salvarsan we are justified in using in the presence. of nephritis is with a greatly reduced dose. We have a rule in the ward that where a patient presents symptoms of heart failure, we put him to bed, build up the heart reserve, try to get him to the stage where there is some compensation of the heart, and then we give neosalvarsan under a dosage beginning with 4 1-2 grams usually. It is very hazardous where nephritis exists to give these cardiorenals anything like what we term an adequate dose unless we have done a phthalein test and investigated as thoroughly as possible the function of the kidneys.

The question of pain seems again to be confused. There is a pain in aortitis, that we know; but clinically it is different from that which we call angina pectoris. The pain of aortic aneurysm is either a pressure pain or an aortitis which is responsible for the pain

and is not strictly speaking an angina pectoris.

I have used benzyl benzoate in handling these cases with striking results. We use it in one dram doses given in the usual way, and the patients get along beautifully. It tides them over to the point where the pain subsides, with rest in bed and treatment for heart failure. Morphine and codein are of course necessary where the pain is more severe and not amenable to the Benzyl Benzoate.

Dr. J. G. Dempsey (New Orleans): I want to bring before the organization the statistical end of cardio-vascular disease. I do not mean those complicated with nephritis or any disease of the kidneys. I looked up the statistics, and in 1921, 2,385 deaths occured from cardiovascular disease. In 1922, 2,503. 218 more people died in Louisiana from cardiovascular disease in 1922 than in 1921. In the City of New Orleans, 1,104 in 1921, 1,136 in 1922.

I think these figures ought to go into the records because they can be substantiated and have their influence, and in the future if the Society should have such a paper it would be well to take into consideration whether we are doing anything for this disease or not.

Dr. Homer Dupuy (New Orleans): The essayist spoke of the pressure on the recurrent nerve, and I wish to speak of that phase.

Pressure on the recurrent nerve is among the first symptoms of aortic aneurysm. Let me remind you that the left pneumogastric is longer than the right, and that after coursing over the arch of the aorta, it sends the left recurrent from under the arch, and beyond the arch to the Larynx therefore in aortitis or pressure unquestionably may extend the left recurrent nerve. We expect a great loss of voice aphonia—but pressure on the left recurrent nerve gives voice disturbances. There is merely a dysphonia. Therefore in our examination for aortis aneurysm the X-ray is not infallible, pain is not always present, we should always inspect the larynx.

Remember again that in the recurrent nerve we have this remarkable phenomenon—one nerve in which there are two sets of fibres, the abductor fibres and the adductor fibres—those that open the larynx and those that close it. If pressure on the left recurrent nerve is slight in the beginning the nerve fibres first pressed upon are the adbuctor fibres. Therefore there would then be no disturbance of the voice. But the laryngoscope will tell us absolutely that the vocal cord remains on the middle line. This unquestionably means beginning pressure on left recurrent nerve. As the pressure continues the deeper abductor fibres become involved. The vocal cord on left side then assumes the position it assumes after death, namely a position it assumes between abduction and adduction, The laryngoscope gives us valuable information relative to aneurysm of the arch of the aorta.

Dr. H. P. Jones (closing): I laid aside my paper, and perhaps I did not make myself understood. I did not bring forward the fact that this picture is of a normal chest.

These cases are not necessarily all aneurysms but cases of aortitis and of aneurysm. Some are aortitis and some are aneurism. These pictures are teleoroentgenograms and are taken at a distance of six feet, and the result is the measurements are not so large as those made at the ordinary 26-inch aistance. The measurement of a great many men of the same size—weight, stature and physique, rather tends to the lower measurement which I have given you than to 7.5 cm.

I mentioned in my paper that Bordeau had probably done more work on this subject than any other known man. There is also a valuable contribution to this study in the work published for the Army in the control of their X-ray work. It is a manual and costs about $1.50, and is very valuable to have.

I do not wish Doctor Guthrie to feel that I mind his differing from me. If we all agreed it would not be interesting. I rather welcome criticism than not to have any at all.

ABRUPTIO PLACENTAE.*

By H. E. Bernadas, M.D.,
New Orleans.

Classified by Rigby as Accidental Uterine Hemorrhage occurring in the latter months of pregnancy, in contradistinction to unavoidable hemorrhage or Placenta Previa.

Paul Portal in 1664, Gottleib in 1709, Goodel in 1869, Holmes in 1901, down to Kerr and Shears, have dealt with this condition under varying titles; such as Accidental Uterine Hemorrhage in later months pregnancy. Ablatia Placentae, Abruptio Placentae, etc., not only the nomenclature and pathology, as well as the mechanism of causation in this condition, but also the treatment, have been the cause of numerous and varied articles and treatises.

The purpose of this paper, therefore, is not to bring out any radical departure in these, but instead, to ask that you report all such cases coming under your observation, so that the ratio of occurrence of this condition in pregnancy, and the ratio of mortality, may be brought to an intelligent interpretation.

To show you the vast disparity in the ratio of occurrence relative to this condition in all cases of pregnancy, I will quote the following figures:

Lobenstine and Harrar, 47 times in 42,000 cases at New York Lying-in-Hospital;

Chicago Lying-in-Hospital, 6 cases in 3,600, only two required treatment;

Dublin Rotunda, 70 cases in 6,453;

Holmes estimates that about one case in

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200 is of pathologic interest, and one case in 500 of clinical interest.

The condition is one which occurs in the later months of pregnancy when the foetus is viable. The causes are either pathological or accidental. A number of authorities are of the opinion that accident alone is rarely a causative factor, but is nearly always superimposed upon a pathological condition of the uterus, such as, endometritis in Multipara, increased blood pressure, fibroids, nephritis, leus, etc. This opinion is not universal as an equally large number of authorities believe that trauma, prolonged mental shock, coughing, straining, fainting, vomiting, falls, blows, unskilled manipulation in twin labors, traction on cord in ordinary labor, as well as forceps operation and version.

The case being reported was caused by trauma due to straining, as the patient was a primipara, not leuitic, and in normal health, free from fibroids, with no history of endometritis.

Diagnosis: This condition occurs after the six and one-half or seven month of pregnancy, either following traumatism or otherwise. The patient who was otherwise normal, within 24 to 48 hours or even 72 hours following an accident, develops a severe pain in the upper abdomen, sometimes accompanied by nausea and emesis, and sometimes by a showing of blood either in large or small quantities "per vagina." Upon examination, the patient presents the evidences of marked anemia and shock, accompanied with thirst. Examination of abdomen reveals a round (in contradistinction to the normal oval shape of uterus in pregnancy) hard tense and sensitive uterus. This uterus has a hard woody feeling and has been styled on account of this "*Uterus de Bois.*" Vaginal examination reveals a normal firm cervix with about one or two fingers dilatation with presenting parts easily examined either within or without the cervix, through vaginal vault.

Physical Aspect: This differentiates it from Placenta Previa, where we have the soft boggy, dilatable cervix, with the presenting portion of the placenta preventing an examination and diagnosis of the presenting part of foetus.

The reason for this difference in appearance and feeling of parts in vagina is the physical difference of the two conditions. In Placenta Previa we have a low implantation of the placenta, at, near, or over the Internal Os, which does not give as the Internal Os dilates, and as a result is torn off and separated, causing the hemorrhage. In the condition being reported, we have a placental implantation in the fundus. In over 50% of the cases, this is a posterior implantation.

Mechanical Aspect: The bleeding occurs as a rule in the center of the placental implantation where the separation first occurs. As the bleeding accumulates in this small cul-de-sac formed by the central raw surface of the placenta and the uterine wall, by hydraulic pressure, frequently assisted by uterine contraction, the placenta is torn away more and more towards its edges or periphery. Quite a large quantity of blood may accumulate in this Cul-de-sac, sufficient to cause pronounced and alarming anemia and shock. If the periphery of the placenta remains attached we have then a concealed hemorrhage. Should any part of the marginal attachment be torn away, the blood thus released finds its way between the membranes and uterus and may still be confined to the body of the uterus by the membranous attachment below, and still remain concealed. The presenting head may also press sufficiently hard against the Internal Os to prevent the blood from escaping and we will again have concealed hemorrhage, or the blood may rupture through a weakend place in the membrane into the general uterine cavity and commingle with the amniotic fluid, and the hemorrhage will still be concealed. However, in a large proportion of the cases, the blood having freed itself from the placento-uterine cul-de-sac finds its way to the vagina by the membrano-uterine way.

Pathological Aspect: The blood which presents at the vaginal orifice as a rule is red blood, although it may be accompanied by block clots. The blood which is delivered with the Placenta and membranes at the completion of the labor is as a rule black, sticky, grumous and organized clots, sometimes totally infiltrating the whole body of the placenta and becoming organized.

The pathologic examination of the placenta in the case now being reported was:

"Hemorrhage behind entire placenta, beginning organization of clot extending as far as surface of Placenta. Beginning Organization of Clot in Placental Vessels as far as surface of Placenta. Hyaline Degeneration of Placental tissues. Umbilical cord vessels show no change. Necrosis of placenta and cord, no evidence of any acute or chronic infection."

I have taken up these different aspects with the diagnosis as they clarify the difference between placenta previa and abruptio placenta.

Treatment: Treatment has been as moot as the nomenclature, due largely to the stage and degree of the conditions, the condition of the patient, and the individual preference of the operator. Where the bleeding, either concealed or occult, has been slight, the pregnancy has not advanced to the stage where the foetus is viable, (i. e., where the fundus reaches above, midway between umbilicus and ensiform cartilage and the patient is comfortable and presents no evidence of anemia, no pains, and the foetal sounds are audible; the treatment here is absolute rest, morphia and constant observation, until recovery and all danger is past, with caution to the patient to do nothing strenuous until normal delivery. This all authorities agree upon.

However, when the bleeding continues, and evidences of anemia, shock and pain progress rapidly, the authorities disagree upon how to do that which all agree must be done. Some advise rupturing the membranes, tightly bandaging the abdomen, giving 15-30 Mms. of Fld. Ext. of Ergot every four hours and waiting; others plug the vagina and cervix with gauze combined with the above method.

Holmes and others advocate the use of the metreunynter introduced into the cervix and dilated, with or without the use of bandage over the abdomen, Ergot and Pituitrin.

Dilatation (not forcible) of the Cervix, with application of forceps or version.

Vaginal Caesarian Section (Durhesen) and abdominal Caesarian Section.

In the case reported, I used the vaginal Caesarian Section after separation of the bladder wall from the anterior surface of uterus, with application of forceps, and completed the labor in a very few minutes without shock to the patient.

The selection of means for rapid delivery must be guided by existing conditions. If vagina is dilatable by digital manipulation, use version or forceps, perforating foetal head if necessary, because foetus as a rule is dead. If cervix is not dilatable and patient is a primipara with a dead foetus and no pelvic deformity, the vaginal Caesarian Section is the operation of choice as it is followed by less danger from bleeding and sepsis than the abdominal route. Most authorities recommend when the abdominal route is selected, to do a Poro or Hysterectomy immediately after emptying uterus because of the disassociation of the uterine muscular fibers brought on by hemorrhagic infiltration of same at the time of accidental placental separation.

The blood under pressure penetrates the muscular fibre bundles and disassociates them. Their vitality and resistance having been thus lowered they do not contract during or after labor and are subject to attack from septic invasion, where the abdominal section is made, owing to the lowered resistance of the uterine body. This does not hold true in a vaginal section as the incision is in the lower part of the uterus, far distant from the seat of the traumatic lesion.

CASE HISTORY.

Mrs. J. L. D., age 24; Primipara. Has had measles and tonsilitis.

With exception of father who died of Tuberculosis, family history negative.

On April 23, 1921, was called by a colleague to see Mrs. D. She gave history of having last menstruated on September 22nd, 1920, of having during all of this time been robust, full-blooded and healthy. On Wednesday, April 20th, at 9 a. m., she caught her arm between door and door frame tried to release herself and became greatly frightened and highly hysterical. After considerable effort and struggle she succeeded in freeing her arm. Except for being nervous, she experienced no ill effects until Thursday, next day, at 10:20 a. m., when she complained of marked pain in back, followed by

abdominal pains. She was examined by her physician who found about one finger dilatation. At 3:30 p. m. she had a hemorrhage, saturating sheet and mattress. Gradually diminishing until it subsided at 7 p. m. The physician decided to observe developments as hemorrrage had stopped. Patient continued to complain of pain in upper abdomen. On the 22nd p. m. she had temperature 103 degrees. When called in on the 23rd found temperature 100 degrees; patient very pale and anemic, rapid pulse (130) small volume, uterus round, hard and woody. Cervix about two fingers dilatation, head presenting easily discernible, internally and externally in vaginal vault. Made a diagnosis of Abruptio Placenta. Auscultation revealed no foetal heart sounds, palpation showed no evidence of foetal life, I advised immediate emptying of uterus. Patient was transferred to French Hospital in ambulance.

Under ether anesthesia, after futile attempts at gentle digital dilatation, an ampule of Pituiturin was given hypodermatically a self-retainer was inserted in vagina, cervix brought down by vulsella. Two traction sutures were inserted firmly in anterior lip of cervix, about ¼ inch away, on each side of proposed line of incision. With cervix well drawn down, a transverse incision was made through mucuous membrane over anterior surface of vagina, and bladder pushed back, a longitudinal incision was then made extending up through wall of cervix. This allowed ample room for the immediate application of forceps to foetal head, which was promptly followed by delivery of foetus, dead about three days. The placenta and membranes were delivered by gentle pressure over body of uterus. Then an enormous quantity of black grummous sticky blood and blood clots followed, in quantities about equal to size of placenta. Following this, the vagina was swabbed out, vaginal traction guides were drawn down and incision in cervic sutured with No. 3 Chronic Gut, bladder drawn down and vaginal surface sutured back with No. 2 Gut. A drain was inserted in Cervical Canal, small pack placed in vaginal canal, patient given another hypodermic of pituitrin and put to bed with a Murphy Drip of normal salt solution and black coffee. Pack and drain were removed next day and patient made uneventful recovery. She returned home and was in bed all told about 12 days from date of delivery. Lochial discharge stopped completely on 21st day.

Conclusions: 1. This case was apparently purely traumatic in origin, as findings and history were negative.

2. Small central separation happened at time of accident due to straining. Pain began next day at 10:30 a. m., due to accumulation of blood in placental-uterine Cul-de-sac. At 3:30 p. m. margin of placenta and membranes were separated by large accumulaton of blood causing visible hemorrhage. Pains then forced head down causing it to act as a plug, hence stoppage of bleeding.

3. Findings in placenta showed hemorrhage had occurred behind whole placenta, causing immediate death of foetus. Organization of clot showed this had happened before visible signs of hemorrhage.

4. Because she was a primipara, with a dead foetus, and a hysterectomy following abdominal delivery, would have prevented her from future conception. The operation of selection was vaginal Caesarian Section,—1st, because following this, the patient retained a normal functioning uterus capable of future conceptions; second, because of lessened risk from shock, hemorrhage and sepsis to the mother.

DISCUSSION.

Dr. H. E. Miller: I wish to thank Dr. Bernadas for the privilege of discussing his paper and to congratulate him on his method of handling this case of accidental hemorrhage. The procedures that are usually recommended are, I believe, too drastic for the majority of cases of concealed and visible accidental hemorrhage. If we stop to analyse the actual existing mechanical conditions in either type of premature separation of the placenta, we are forced to realize that there are other treatments which are much more conservative and which minimize the fetal and maternal risk.

Concealed hemorrhage is, with the single exception of acute sepsis, the most serious accident which can happen to a pregnant woman. This is largely due to the fact that early diagnosis is difficult and that the uterus, for some reason which we cannot explain, is not healthy in muscular tone. In this type the blood collects in the uterus because it dilates so easily that the intrauterine pressure is never sufficiently great to overcome the slight resistance offered to the outflow of blood through the cervix, while in the external type the uterine muscle prompts a reaction which raises the intrauterine pressure and almost immediately forces the blood through the cervix. In concealed hemorrhage, therefore we have to deal with a uterus the muscle of which has for some reason lost its normal contractile tone, and whose elasticity is as a result impaired. It is quite obvious that a ruptured vessel in a closed cavity can bleed only so long as the pressure inside the cavity is less than the blood pressure. Once the intrauterine pressure is equal to the blood pressure, bleeding ceases. If the blood can escape from the cervix as rapidly as it flows from behind the placenta, then such equalization never takes place. If the uterus is healthy in tone and the outflow from the cervix is prevented, the two pressures rapidly become equal and bleeding ceases. If, however, the uterine fiber has lost its tone and the uterus dilates, then the intrauterine

pressure can never equal the blood pressure and as a consequence the hemorrhage is never checked.

It is obvious from these deductions that packing the vagina will be a most satisfactory treatment in external hemorrhage, but will be of little or no avail in the internal type unless the condition is recognized early and a vaginal pack introduced with the hope of inducing labor pains. At the same time small, repeated doses of pituitrin may stimulate uterine contractions and assist in raising the intrauterine pressure and inducing labor. Once the patient begins to have strong labor pains, a great deal of the risk in this type of hemorrhage disappears. Unfortunately, however, a fair percentage of the cases of concealed hemorrhage occur before labor pains begin, and the case assumes such a serious character that temporizing measures are out of the question. In such conditions, accouchement forcé with forceps, or version and breech extraction, or vaginal Caesarean section are to be resorted to.

Like the internal variety, the outcome of the case of external accidental hemorrhage depends largely on whether or not the patient is in labor. If she is not in labor when the hemorrhage starts, there are two indications which must be met immediately: checking the hemorrhage and inducing labor. If the bleeding can be satisfactorily stopped for the time necessary to bring on uterine contractions, the condition resolves itself into a comparatively simple one. With the uterus in a healthy state, as is evidenced by external hemorrhage and uterine contractions, the hemorrhage can be checked by packing the vagina, which will permit of an equalization of the intrauterine and the blood pressure, and will also induce labor. The success of this treatment, however, depends upon three points: the uterus must be in good tone, the ovum must be intact, and the vaginal plug must be tightly applied. If this treatment fails, we can again fall back on accouchement forcé with version or forceps, and vaginal Caesarean section.

None of the last named methods of treatment, however, should be used except as a last resort, and when the seriousness of the case outweighs the risk to which you are subjecting the patient. Unfortunately these patients are as a rule markedly shocked, and anything approaching an extensive surgical procedure superimposes sufficient additional shock to cause a mortality ranging from 35% to 60%. No consideration is to be given the baby, as about 70% die at the onset of the hemorrhage. I would strongly urge conservative treatment by packs, small doses of pituitrin, abdominal binders, and occasional rupture of the membranes in the external variety, in view of this frightful mortality as a result of any radical attempt to relieve the condition.

Dr. E. L. King (New Orleans): I have had three cases in the Charity Hospital of abruptio placentae. The first case was a multipara with an undilated cervix, with a systolic blood pressure of 50, so the first thing we did was to give her a saline infusion and then a transfusion of blood. On account of the undilated cervix and the fact that the patient was not in very good condition, I did a Caesarean section followed by hysterectomy. The baby, of course, was dead, but the mother made a fairly uneventful recovery and is still living. The etiology in that case was obscure. We did not find any sign of toxemia or of chronic nephritis, and there was no history of trauma.

In the second case the woman came in well advanced in labor, and was delivered normally. I do not remember whether we transfused her or not, but she needed it. She came around fairly well, but had a violent nephritis with high blood pressure and lots of albumin, and she finally died of anuria about three weeks later.

The third patient was also admitted in labor, the cervix dilated slowly, and finally when she was pretty well advanced we did a version and saved her.

In the last two cases I think the favorable obstetrical outcome was due to the fact that there was not much infiltration of the uterus. We must bear in mind that we have two different types of this condition, one in which there is considerable infiltration of the uterine wall with blood and one in which there is not. In the former type the uterus is liable not to contract and delivery will be followed by fatal hemorrhage. That was the condition in the first case, a typical abruptio placentae with so-called "utero-placental apoplexy."

One of the French writers has recently reported over seventy cases, and he is not in favor of rupturing the membranes or of vaginal Caesarian section. All of these cases treated simply by rupturing the membranes died, and of the six vaginal Caesarean sections his mortality was five out of six. He leans to the abdominal Caesarian section, with occasional hysterectomy, according to indications; but his paper deals with that type known as abruptio placentae with 'utero-placental apoplexy," where there is hemorrhage into the uterine wall. In other cases where there is no hemorrhage we can succeed with a less formidable line of treatment. The great difficulty is in knowing what is happening in that uterine wall when you cannot see it. If we can tell which one has a non-contractile uterine wall and which one has not, then the treatment can be selected. Otherwise, we are still somewhat in the dark.

Dr. H. E. Bernadas (closing): The point I wish to bring out is that the vaginal route is preferable, because if you use the abdominal route you will have to do a hysterectomy. You are opening the uterus at the point of least resistance and you have a spot which will give way to sepsis or infection and you are apt to lose the patient. This case was delivered by vaginal section and she went home in ten days. She is perfectly well today.

CONGENITAL ARTHRITIS WITH ANKYLOSIS OF VARIOUS JOINTS.*

By Paul A. McIlhenny, M.D., F.A.C.S.,
New Orleans.

In a rather extensive search through the literature no mention of Congenital Arthritis has been found, never-the-less it seems hardly possible that the affection has not been encountered by a number of observers, especially as several cases of Congenital Ankylosis, though extremely rare, have been reported. It is not my intention to enter into a lengthy discussion of the various forms of arthritis, their etiology, pathology, treatment, etc., but simply to report this one case that has come under my observation, and it's probable causative factor.

J. M. White, male, aged 11 years, a native of Louisiana, was referred to me by my friend Dr. J. G. Martin, of Lake Charles, La., on April 29th, 1922. F. H. Father living and well. Wassermann negative. Mother living and well. Wassermann negative, but up to five years ago she had suffered for years from bad teeth, sore throat, and frequent attacks of rheumatism; during the year previous to, and while pregnant with this child, she had suffered greatly with attacks of multiple arthritis which at one time confined her to bed for several weeks. A brother two years older, and a sister three years younger than the patient are strong and healthy. The family are farmers, and there is no history of deformity in any other member of the family.

P. H. The child was born with the legs flexed on the body, and the ankles, knees and left elbow were stiff, both wrists and the right elbow were swollen; soon after birth the swelling in the wrists and right elbow disappeared, and when he was six months old he could move the knees a little; he has always been healthy and has never developed the usual diseases of childhood. He began walking at two years and has always walked on the externe-dorsal aspect of the right foot and the dorsal aspect of the left foot with the toes flexed, and the ankles and knees stiff.

*Read before the Louisiana State Medical Society, April 24-26, 1923.

Examination showed a well nourished, though poorly developed boy, much below the average size for his age. He is of average intelligence, but has a decided speach defect. There is a complete bilateral Ankylosis of the tarsal and medio-tarsal joints; the right foot is in a position of marked varus with slight equinus and a large callosity is on the externe-dorsal aspect; the left foot being in a position of extreme equinus with large callosities on the dorsum of the toes. There is almost a complete ankylosis of the left elbow in full extension, and suppination and pronation are absent; there is a bilateral congenital dislocation of the hips, and the thighs are rotated outward. There is limited motion in the wrists, jaws, and knees, the internal condyles present anteriorly causing the knees to flex laterally. There is a balanitic hypospadias, bilateral undescended testicle, rudimentary scrotum, and a web between the thighs extending one and one-half inch below the perineum. He walks with the legs stiff, and runs sidewise in order to flex the knees. Wassermann negative.

X-Ray examinations show Bilateral Superior dislocation of the hip, with well developed secondary acetabula; there is a backward torsion of both femoral necks, and the cartilages of the femoral heads and original acetabula show evidence of an arthritis at some time; there is fusion of the radio-ulnar articulation and articular changes in the left elbow; there is a fusion or ankylosis of the tarsal and medio-tarsal bones of both feet. No X-Ray pictures were made of the other joints.

It was decided to attempt a correction of the deformities of the feet first, and on May 1st a cuneiform esteotomy was performed on the left foot through the medio-tarsals with the base at the externe-dorsal aspect, enough bone being removed to allow the foot to be forced into a position at a right angle to the leg, thereby correcting the marked equinus; the same procedure was carried out on the right foot, except that the base of the wedge was at the external aspect which allowed the varus to be corrected; plaster of Paris casts were applied from toes to knees with fenestrae over the wounds to allow in-

spection and dressing. As soon as the wounds were healed the fenestrae were closed and the patient encouraged to try to walk with crutches, this he learned to do in a short time. The casts were removed on June 2nd., when he was allowed to begin wearing ordinary shoes. About two months later, on July 25th., we decided to attempt the correction of the malposition of the legs and thighs. It was not deemed advisable to attempt either a bloodless or an open reduction of the dislocated hips, first, because of the age, and second, because the new acetabula were immediately above the normal position, and the stability in weight bearing was excellent. The greatest hinderance to normal function seemed to be caused by the outward rotation of the thighs which was due to the posterior bending of the femoral necks causing the patellae to present laterally; it was therefore decided to attack the femora, and produce a rotation in the shaft. Through a lateral incision just at the level of the lesser trochanter a linea sub-trochanteric osteotomy was performed on each thigh, and while the proximal fragment was held stationery by a long iron screw the distal fragment was rotated inward until the patella presented anteriorly, and the femoral condyles were in their normal position; a double plaster of Paris spica of the hips was applied from ankles to umbilicus with the thighs in a position of slight abduction, and the patient kept in recumbancy for six weeks, he was then allowed to stand up, until he got tired, several times a day; three months after the operation the casts were removed, and massage and active motions allowed. He can now flex his knees to almost a right angle in the antero-posterior position, and and walks on the soles of his feet. The wrists and jaws have been manipulated and active and passive motion encouraged which has resulted in a marked increase in their range of motion. It is planned to attempt a restoration of motion in the left elbow at a later date. As mentioned Congenital Arthritis is conspicuously absent in medical literature, and even congenital ankylosis has received scant attention, it's existence in most reports, being a simple mention of a clinical entity. Two factors in this case, however, to my mind, prove it to be purely a case of Pre-natal Arthritis, the etiological factor being the Chronic Infectuous Arthritis, of the secondary type, in the mother. First, the fact that just after birth it was found that there was ankylosis in several joints; that other joints showed a limitation of motion, and still others were swollen; since there was ankylosis in some and an inflammation in other joints, it is reasonable to conclude that there must have been an arthritis which proceeded the ankylosis. Second the fact that there was a congenital dislocation of the hips; pre-natal arthritis must have existed if we are to give credence to the theory that joint hydrops is one of the etiological factors in such deformities; another point is that the swelling which existed about some of the points subsided shortly after birth.

Personally I am convinced that the developmental defect, as evidenced by the hypospadias, was caused by the general toxic condition of the mother previous to and during pregnancy, and that the arthritic conditions were produced by the same cause.

Dr. E. Denegre Martin (New Orleans): I had the pleasure of seeing this case before and after operation. The doctor had a very difficult problem to deal with. This boy was distorted in every direction. I do not know anything about the etiology, of the discon, but I am sure that this is one case of arthritis that cannot be blamed on the teeth. It may be the tonsils, but it is a rather curious and interesting condition. The Doctor has accomplished a great deal so far and I believe will make his patient a pretty fair and comfortable subject for the future.

NOSEBLEED-EPISTAXIS.*

BY W. MARVYN JOHNSON, M.D.,
NEW ORLEANS.

Bleeding from the interior of the nose is due to a variety of both local and constitutional conditions. It is common in children between the ages of five and fourteen, rare during middle life. In old age it usually occurs as a result of some constitutional disease or local neoplasm. As a rule, properly managed nasal hemorrhage is not of serious import, except in haemophiliacs, malignancy or arterio-sclerosis. The seat of nasal hemorrhage in 90% of the cases, according to Castleberry, is in the anterior portion of the nasal septum. There are three anatomical reasons for the frequency of hemorrhage in this region:

1. The nasal vessels are not supported by a muscular cushion into which they may be crushed by a blow, but lie in more or less intimate contact with bone or cartilage and are protected only by an extremely delicate mucous membrane. The proximity of bone or cartilage prevents the ends of the injured vessels from contracting as readily as if embedded in soft tissue.

2. At this point scabs and crusts from ulceration follow weakening the thin walled arteries.

3. Passing through this region is an arterial anastomosis with one blood current flowing directly against the other.

Blood Supply: The naso or sphenopalatine passes through the sphenopalatine foramen into the cavity of the nose, at the back part of the superior meatus, and divides into two branches; one the internal, the naso-palatine or artery of the septum, passes obliquely downward and forward along the septum nasi, supplies the mucous membrane, and anastomosis with the terminal branches of the descending palatine and the superior artery of the septum, which is a branch of the superior coronary.

The usual site of bleeding, as stated above, is on the anterior superior angle of the triangular cartilage, a spot where the bleeding is easily seen. At this spot which is known as Little's area, a small anastomotic vessel runs which is liable to be wounded in the detaching by the finger nail of the fine mucous crusts that tend to adhere about this point; or the vessel may be broached by a shallow simple ulceration that readily forms here; or it may rupture and bleeding break out spontaneously. The amount of blood that can be lost from such a minute vessel is surprising, and when, actually confronted with a lively epistaxis, the patient bleeding and apparently from both nares, it seems absurd to suppose that only this small vessel should be the sole source of the flow, never-the-less, in more than 90% of the cases of nasal hemorrhage this is the site of bleeding and here it may be stopped if skilfully treated.

Etiology: Under causes due to local conditions within the nose may be mentioned:

1. Traumatism from intra-nasal operations, injuries both direct and indirect, falls, blows and stab-wounds.

2. Defects of the Septum: Contact of the dust laden insipid air upon its convex surface, which in turn produces irritation and finally erosions and hemorrhage.

3. Atrophic Rhinitis: Attempts to remove crusts and scabs in this disease, by picking the nose, are prone to produce erosions upon the septum and terminals and subsequent hemorrhage.

4. Acute Rhinitis: Several cases of acute inflammation of the nasal mucosa, hemorrhage is induced as a result of excessive blowing of the nose.

5. The presence of a foreign body and sequestra in the nasal cavities is attended with varying degrees of hemorrhage.

6. Tuberculosis, or luetic ulceration, and leprosy, malignant neoplasms, sarcomata and carcinomata, benign neoplasms, nasal polypi and fibromata.

Under constitutional causes or general origin of epistaxis may be mentioned:

1. Febrile diseases: At the onset of acute infectious diseases hemorrhage which is usually slight results from the rupture of the engorged thin walled vessels on the anterior part of the septum as in typhoid, typhus, scarlet and malarial fevers, nasal diphtheria, pneumonia and influenza.

2. Blood diseases: Anemia, purpura,

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hemophelia, leukaemia, cholrosis, scarbutus and chronic malaria.

3. Cardiac conditions in which there is an increase in arterial tension; valvular lesions, cardiac hypertrophy, Bright's disease, pulmonary emphysema.

4. Cirrhosis of the liver.

5. Pressure of tumors on the blood vessels of the neck.

6. Violent exertion or exercise.

7. High altitude.

8. Vicarious menstruation.

We have been impressed by the very evident correlation existing in domestic animals between the nose and sexual organs in certain seasons. Similar phenomena may be occasionally observed in the human race. Erectile tissue is found in but three parts of the body; nose and throat, the nipples and the sexual organs.

In the male puberty is accompanied by a change in the voice and nose bleed is common. Recurrent nasal hemorrhage is said to be aggravated by masturbation.

Diagnosis: Specifically depends upon the discovery of the actual seat of the point of bleeding within the nasal cavity or cavities and with the exception of those cases where hemorrhage arises from the lungs, pharynx or larynx or from a fracture of the cranial bones, is based upon the appearance of a flow of blood from the anterior nares.

Treatment: In a majority of simpler cases sudden epistaxis is self limited and requires no treatment. This is especially true in young robust children. In cases of this type the sudden attack is almost immediately followed by an equally sudden cessation of the flow of blood. Hence the loss of blood is immaterial though the patient may be pale from fright.

Prolonged nasal hemorrhage without evidence of constitutional disease or tumors is amenable to pressure applied to the bleeding point. This condition is similar to varicose veins pressure is most effective over bleeding point and useless over distal or proximal end of vessels.

The patient should sit upright and a basin should be held under chin (not nose). This position aids the formation of a clot and avoids the trickling down into the throat. Packing absolutely useless unless evenly distributed and applied to the entire area, is of little value. The membrane of the nose is very sensitive the higher up the more sensitive it becomes.

The possession of a working knowledge of the anatomy of the nose, a developed technic, gentle touch and dexterity will enable the operator to mop out the blood, find the bleeding point and apply pressure with very little discomfort to the patient.

When due to a rupture of a septal blood vessel and the attacks of hemorrhage are both frequent and prolonged the bleeding vessels should be destroyed by means of actual cautery or application of chromic or trichloracetic acid. Great care must be exercised lest too much cautery be used and the condition aggravated or perforation of septum be produced. Operations: "Sub Mucus Pesentisus," Removal of Spurs.

Hypodermics of human or horse serum are used for the control of persistent hemorrhage especially in hemophiliacs.

Severe hemorrhage following intranasal operations which do not subside in response to local applications require the use of continued pressure. Here a Simpson splint may be inserted or a tape gauze.

Following severe or prolonged attacks of nasal hemorrhage where the loss of blood has been sufficient to cause weakness and anemia an enema or an intravenous injection of a warm saline solution should be administered and the patient kept in bed for several days. When due to grave constitutional disease or tumor special measures must be employed.

Hemostatic Serum: Hemostatic Serum is a mixture of three organic substances, each of which has a definite role in bringing about blood coagulation. Two of them are normally present in the body, while one is produced in the blood but is not normally present.

When blood flows from a wound of an otherwise normal person the equilibrium is destroyed and certain combinations take place, resulting ultimately in the formation of a clot which more or less completely closes the wound. From the edges of the wound

the tissue juices exude, and from the blood plates which quickly disintegrate when exposed to the air similar substances are set free. These two sets of fluids mix with the blood and start the process of coagulation, which consists essentially in liberating the prothrombin from its antithrombin binding and in promoting the reaction, first between prothrombin, thrombokinase, and calcium by which thrombin is produced, then second between the thrombin and fibrinogen by which fibrin is produced and the clot formed.

There are two classes of persons who occasionally should have the coagulation time of the blood shortened. First, those who expect to undergo an operation in which the bleeding may be a serious factor. Second, those abnormal persons known as hemophiliacs, who bleed profusely on the slightest provocation, due to a want of equilibrium in the system, prothrombin being lacking or antithrombin being in excess.

Various substances have been prepared to counteract such a condition as the latter and to assist the former class —substances such as thrombin which appears in Coagulose, a soluble precipitate from blood serum, and others prepared from brain extract, such as Thromboplastin and Kephalin, which are essential kinases. Another type of coagulant is Coagulen, a powder prepared from blood platelets by centrifuging and desiccating. Blood serum, and euglobulin which is said to be the coagulative element, have also been used. There are objections to all these substances, although many good results have been reported. Extracts of brain substance and of blood plates are not safe for intravenous injections on account of possible intravascular clotting. They are recommended for local application. Blood serum and euglobulin do not long retain their effectiveness and are, therefore, short-lived.

Hemostatic Serum is shown in the diagram below, which also graphically illustrates in part what happens when this product is introduced into the circulatory system. The blood does not clot any more readily in the vascular system, but acquires the property of coagulating much more promptly than before when it escapes from the vessels.

Blood Coagulation.

The blood clot is the mass which results when the fibrin enmeshes the formed elements of the blood.

(1) Fibrinogen+Thrombin=Fibrin.
(2) Prothrombin + Thrombokinase + Calcium=Thrombin.
(3) Prothrombin + Antithrombin = Equilibrium.
This maintains the fluidity of the blood.
(4) Antithrombin+Anti-antithrombin =Equilibrium.
This permits the interaction in (2).

DISCUSSION.

Dr. M. P. Boebinger (New Orleans): Nose bleed is quite an interesting subject. We can have nose bleed from almost anything, but the background must always be thought of. Surgical interference within the nose, for instance, submucous work, sinus work, even removing a polyp sometimes gives one quite a bit of trouble, even alarming.

One of the simplest methods is to pack. The length of time the pack should be permitted to remain in the nose should never be more than twenty-four hours. In removing an adenoid you sometimes find that the vault is not smooth and round—on the contrary, you sometimes find a little prominence. Taking a curette and making a circular sweep will strike these prominences, hence hemorrhage. What shall we do? To control the hemorrhage in this particular region is very easy—passing a small metal catheter to the end of which is attached about No. 15 silk, and a very large pack to the end of the silk. The catheter is withdrawn, the thread is made tense, with the index finger of your left hand pass it up behind the soft palate, usually having the pack larger than the space it will occupy, because as soon as the blood strikes the pack, like it would with a McBurney splint, it is smaller.

Then we have hemorrhage following submucous resection, and some from intranasal work. Quite a number of my colleagues say that in ethmoid and sphenoid work they do not pack. Be that as it may, gentlemen, as far as I am concerned I always pack. Then I can stay in bed the next morning. I allow the pack to remain in twenty-four hours. Many a time one is called to remove one pack and introduce another. A very simple method is to use long gauze like that used in packing following a mastoidectomy, and then use an ordinary Simpson-McBurney splint. Sometimes silver nitrate does good work, and a little pressure with your finger with a little adrenalin will go good work. Other times one is forced to use trichloracetic acid, or better still, cocainize each part, use adrenalin, and then use the actual cautery and thereby obliterate the troublesome vessel. In sinus work it is sometimes necessary to use some force and pack from the posterior almost to tip of the nose.

INTESTINAL INFECTION WITH ENTAMOEBA HISTOLYTICA AS A FACTOR IN ARTHRITIS DEFORMANS.

BY SIDNEY K. SIMON, A.B., M.D.,
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In California States Journal of Medicine, of February, 1922, Kofoid and Swezy present a brief report of a case of arthritis deformans, in which the protozoal organism, entamoeba histolytica, was found, in the bony structures of the hip joints, removed at operation, by Professor L. W. Ely, of Stanford University. No claim is made in the report, of a comprehensive study of this interesting finding, though the authors promise further research, and assurance is given, of the publication of section photomicrographs in a later communication. A plea is likewise put forth, by the authors, for a more general examination of specimens of feces in all cases of arthritis deformans, with the view of detecting the possible presence of an entamoeba histolytica infestation of the intestinal tract. Since the publication of this article, I have had the opportunity of observing a case of advanced arthritis deformans, of the atrophic type, in a patient, in whom an active intestinal entamoebiasis has been demonstrated. It is needless to say, that the confirmation of a direct causal relationship, existing between an entamebic infection and the destructive lesions of arthritis deformans, would present possibilities of great importance in clinical medicine. The essential lesion of arthritis deformans, has been described by Ely, in previous communications, as consisting of a primary necrosis, of the bone marrow in the region of the joint. Subsequent changes involve a hyperplasia of the bone and cartilagenous tissue around the necrosed area, which eventually degenerates, and wears away thus leaving an articular surface of dense, eburnated bone. This constitutes the type described by Goldwaite as hypertrophic or osteo-arthritis. In the atrophic form, often spoken of as rheumatoid arthritis, inflammatory proliferation occurs principally in the joint capsule and especially in its synovial lining. The pathological process, presented by both types differ in many respects from the arthritides produced by such organisms as the streptococcus, the tubercle bacillus or the Treponema pallida. Attempts have frequently been made in the past to obtain cultures from the synovial fluid and from the necrotic bone or cartilage in cases of arthritis deformans, without success. The diseased areas in fact have been found consistently sterile, though the supposition is that the original infectious bacterium has become attenuated or has been killed off entirely as a result of subsequent pathological changes. In the absence of a demonstrable organism, the etiology of the disease has always remained cloudy, though various hypotheses have been advanced, including remote foci of bacterial infection in teeth, gums, tonsils, and other organs, indeterminate intestinal toxemias, as also the contributing effect of certain atmospheric changes. The discovery of the Entamoeba histolytica, in the region of the necrosed area of the bone in the case reported by Kofoid and Swezy brings forward a new conception of the etiology of the disease. Barrow was the first to suggest the possibility of this relationship, the idea occuring to him as a result of finding pathogenic entamoeba in the stools of one of Ely's cases.

It is interesting to note, however, that as far back as 1916, Moorhead discussed the occurence of arthritis as a complication or sequel of amebic dysentery. This author reported in detail, 6 cases of progressive polyarthritis, in connection with chronic dysentery, in 4 of which typical forms of entamoeba histolytica were present in the feces. He likewise, suggested that in all cases of arthritis, a history of dysentery should be inquired into, and, if obtained, advised that a course of emetin therapy be instituted at once. Moorhead did not attempt to demonstrate the presence of the organisms, either in the synovial fluid, or in sections of the joint tissue, removed by operation. In a recent case, reported by Kofoid and Swezy, this further and more definite proof of the direct invasion of the joint structures by the entamoebae, was apparently demonstrated. In this instance, a portion of the head of the femur was removed at operation, fixed in formalin

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solution, decalcified, and sections stained in iron hematoxylin. The entamoebae were found on the outer circumference of the areas of necrosis, in greatest numbers, around the peripherial capillaries. The stained organisms presented the typical nuclear structure of the entamoeba histolytica. In some instances, even the characteristic pseudopodia could be made out. The nuclear arrangement was distinct from that presented by other forms of parasitic entamoeba or of tissue cells, either normal or pathological. The organisms confirmed in every respect, to the type previously described by Councilman and Lafleur as present in the tissues surrounding entamoebic ulcerations of the intestinal tract. While the pathological evidence in this case, of a remote infection of the joint structures with entamoeba histolytica would appear convincing, it must not be overlooked that, in the past, with the exception of Moorhead's observation, mention of a clinical relationship between the two conditions, has rarely been recorded. Garrod, for example, writing, in The Allbut System of Medicine, claims that while arthritis is undoubtedly frequently met with in bacillary dysentery, he was unable to find any definite evidence as to its occurrence in the amebic form. Such well known authorities on entamoebiasis as Brown, Manson, Strong or Rogers, fail to make mention of arthritis as a complication of the disease. On the other hand, numerous references to arthritic complication in bacillary dysentery is by no means infrequent. In 400 cases of arthritis, recently studied by Pembrook, based on experiences in the Army, dysentery was given as the causative factor in 33 or 8.25. The type of dysentery was not stated, though presumably it was of bacillary origin. This author is credited further, with the significant statement, that arthritis may follow infection with yeast and fungus growths, and also with the entamoeba buccalis though the later has not been confirmed.

A further interesting problem in connection with the invasion of the bone marrow by entamoeba histolytica, is involved in the route which the organism traverses. Infection with the Entamoeba histolytica occurs primarily in the intestinal tract. Invasion of the liver, which constitutes the most frequent form of secondary complication in entamoebiasis follows the path of the portal vein. In some few instances the organism has been known to reach the brain, 35 cases in all this remote complication having been reported, in the literature to date. Invasion of the spleen is of even less frequency, and arises most probably from contact with lesions in the transverse and descending colon. Cases of pulmonary amebic abscess can always be traced to the liver. In the case of cerebral involvement, the entamoebae probably travel from a focus of infection in the liver through the vena cava into the pulmonary artery, finally reaching the brain through the arterial system. A similar mode of arterial distribution must occur in the event that the entamoebae find lodgment in the bone marrow. In the case reported by Kofoid and Swezy it is interesting to note, that no mention is made of clinical complications other than the arthritis.

In the following case of chronic arthritis deformans, complicated by an intractible type of dysentery, the presence of the vegetative entamoeba histolytica was demonstrated in the feces.

T. S. male, aged 27, married, auto salesman by occupation, a native of Texas, was admitted to Touro Infirmary April 18, 1921. The past history of the patient had been uneventful. Outside of the usual diseases of childhood, his health had always remained good. During the world war, he served in the airplane service, in his native state of Texas, for a period of one and one-half years. During this time, he claims to have lived mostly in the open, and was exposed to all types of weather changes. To this, he attributes the onset of his troubles. The arthritis appeared in definite form, however, eight months previous to his admission to the Infirmary while the patient was sojourning in Cuba. The disease attacked the knee joints first, speading rapidly to the ankles, toes, wrists, elbows, fingers, shoulders, hips. The course pursued, was that of a subacute infection. The inflammatory process and temperature changes followed in the beginning only a mild course. The treatment at this time, consisted of thermal baths and salicylate medication, which brought little relief. Within two months, the patient became bedridden. In January, 1921, he came under observation in a local hospital, and at that time, all sources of possible focal infection were carefully sought for. The tonsils were subsequently removed, and autogenous vaccines

prepared therefrom, five injections in all having been administered. The teeth and gums were likewise reviewed by a competent dentist, and a number of teeth with infected pulp canals were extracted. Slight improvement followed these procedures, but proved only temporary. He was admitted into Dr. Matas' service at Touro Infirmary approximately one year ago, and though he has received the benefit of most painstaking treatment, involving various well established methods, no improvement has been noted. His present status, is one of extreme emaciation with, a marked degree of anemia present. The weight registers 45 pounds under the normal weight (165 pounds.) Blood picture, red count 2,950,000. No special abnormalities have been noted in the urine. The joints present the characteristic appearance of the atrophic type of arthritis deformans. Marked deformity with ankylosis is present with diffuse infiltration of the entire joint tissues and degeneration and erosion of the cartilage. The skeletal muscles are markedly atrophied. The joints are tender to touch, and the patient experiences keen pain on the slighest movement. The dysenteric complication in the case began about four months following the onset of joint symptoms. Prior to that time, the bowel functioning had been normal. The number of daily dysenteric bowel evacuations have varied, but average about four in twenty four hours. The character of the stool is distinctly dysenteric, being composed largely of blood, mucus and pus. Considerable tenesmus accompanies each evacuation, and in recent months a tendency to spontaneous evacuation has been shown. The entamoeba histolytica in active form was discovered in the stools in February 1922. A course of ipecac medication by mouth and of emetine hydrochloride hypodermatically was immediately instituted. Because of the patient's generally unsatisfactory condition, full dosage with these drugs was deemed inadvisable. The use of the specific medication, however, has removed all evidence of the protozoal infection in the feces at the present time. Nevertheless, in spite of this, the dysenteric stools have continued and large amounts of pus and blood are still present in the stools. Proctoscopic examination has been persistently refused by the patient, though presumably an extensive ulceration of the large bowel exists No change in the condition of the joints was noted following the administration of the ipecac and emetine. We have likewise been unable to obtain any of the synovial fluid or joint tissue for examination for the possible presence of the protozoal organism.

I wish to acknowledge my indebtedness to Dr. Rudolph Matas for the privilege of studying and reporting the interesting findings in this case.

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ETIOLOGY OF PELLAGRA.

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This brief paper is intended as a summary of an investigation made of this important disease in the last ten or twelve years.

While making some eleven thousand examinations of feces I observed in many of them a peculiarity, because of the large number of bacteria present, which seemed so different from the usual that I began to investigate and found them to be associated in some way with pellagra.

When cultivated from feces on the usual media the colonies of the invading organism are identified by the use of a serum obtained from natural blisters occurring on severe cases of the disease, from animal inoculation, and from cultural characteristics later mentioned.

The organism shows the following characteristics: A Gram-positive sporulating, actively motile bacillus; aerobic and slightly facultative anaerobic; non-gas producing; grows at 37°C. and at room temperature; pellicle formation on bouillon; liquifies gelatine; digests Loeffler's blood serum does not ferment dextrose, lactose, saccharose, or maltose; peptonizes milk; conforms somewhat to those of organisms of the Subtilis Mesentericus group.

Some cultural characteristics of the organism, worked out with the assistance of Prof. B. F. Kaupp, Pathologist and Bacteriologist of the N. C. Agricultural and Mechanical College, are as follows: Corn Agar Plate. A twenty-four hour colony measures from 1 to 2 millimeters in diameter. The surface is convex. The borders are smooth.

The color is whitish gray. Forty-eight hour colonies are umbonate and measure 3 millimeters in diameter.

Corn Agar Slant. At twenty-four hours the growth is abundant. Form, aborescent; elevation, raised; luster, glistening; topography, smooth; optical characters, opaque; chromogenesis, grayish with age, odor, slight and apparently characteristic of the organism; consistency, a tendency to be slimy; medium not affected.

Corn Agar Stab.—At the end of twenty-four hours there is apparently no growth along stab line. Surface growth abundant and same as for corn agar slant.

Potato.—The twenty-four hour growth is abundant. Surface rough and pitted. At the end of three days at incubator temperature the surface takes on a light tan color and growth covering surface has an areolate appearance. Luster, dull.

Bouillon.—Scum on surface. Bouillon not clouded at end of forty-eight hours. Heavy precipitate in bottom of old cultures. Scum wrinkled in old cultures.

Two Per Cent. Dextrose Agar Slant.—The twenty- four hour surface growth is abundant with tendency to spread over entire surface. Edges, smooth. Line of puncture not closed and growth moderate and echinulate.

Milk Inoculation.—At the end of twenty-four hours the milk is not coagulated. Slight separation of surface whey. Cultures of forty-eight hours and older show digestion of casein. Delicate membranous surface growth. Contents of tube examined after one week's time and no acid present. Medium at end of week still neutral to slightly alkaline.

Gelatin, Plain—Stab, where the stab lines closes there is no growth below the surface. At the end of twenty-four hours at a temperature from 85 degrees to 90 degrees Fahr., there was a slight whitish growth at the surface, but none along the needle tract. Growth continues till entire surface is covered, which is about three or four days. There is slow liquefaction of stratiform character and finally after ten days a scum-like growth.

Two Per Cent. Each, Beef Extract, Dextrose, Corn, Potato.—Twenty-four hour growth ,no scum on surface. Bouillon clouded. Heavy precipitate in bottom. Scum appears on surface in two to three days and becomes wrinkled in older cultures.

Two Per Cent. Beef Extract, Dextrose, Corn, Potato, Agar Slant.—Twenty-four hour growth very abundant, covering entire surface and extending more deeply into medium.

Two Per Cent. Dextrose Bouillon.—Fermentation tube, growth abundant at end of twenty-four hours in unclosed arm. No gas formed nor growth in closed arm. Apparently aerobic as there was a plain line of demarcation at commencement of closed portion.

Two Per Cent. Lactose Bouillon.—Fermentation Tube.—Same results as in bouillon fermentation tube.

Two Per Cent. Saccharose Bouillon Fermentation Tube.—Same results as dextrose fermentation tube.

One Per Cent. Saccharose Agar Stab. Needle tract did not close entirely and at the end of twenty-four hours showed a slight echinulate growth along the needle tract. Abundant surface growth spreading over entire surface.

One Per Cent. Saccharose Agar Slant.—A twenty-four hour growth was spread over entire surface. Tendency to be aborescent. Otherwise the same as corn agar slant.

One Per Cent Lactose Agar Stab.—Same as corn agar stab.

One Per Cent. Lactose Agar Slant.—Same as corn agar slant.

All cultures present a similar appearance, that is, a deep cream to light tan with similar appearing surface. The light tan is more typical when grown on potato and the cream when grown on agar and a skum on liquid media as bouillon.

In old cultures there is spore formation, the spore apparently forming near one end of the bacillus. These bacilli appear twice to four times in length as compared to diameter. The ends of the bacilli are apparently slightly rounded.

Search for the Organism in Normal Stools.—Only ten normal stools have been plated out for search, for this organism, but the organism was not found.

The organism seems to be pathogenic

for the following reasons: First, it proves to be constant in the stool while definite symptoms of pellagra exist. It has been isolated from stools of three pellagrins three different times. It has been isolated from one specimen from each of twenty-three other patients suffering from pellagra.

Second, the organism in pure culture when fed to mice produces a toxin that causes death in twenty-four to ninety-six hours. Those that die early seem to die of septicemia. Those that live three to four days seem to die from general weakness and emaciation. The organisms are found in all the organs after death. Pure cultures have been obtained.

Third, blood serum from pellagrins as a rule has very little effect on the organism. In very severe cases with high fever the blood serum occasionally gives a positive widal reaction. Serum from natural blisters occurring on pellagrins and serum from blisters produced from cantharades plasters renders the organism non-motile and agglutinates them in three to thirty minutes in a mixture of the serum with an active culture in proportion of 1 to 5, or 1 to 10, or even 1 to 50. Similar tests were made with typhoid and colon bacilli with negative results. Serum from blisters of healthy individuals gives negative reactions with all these organisms. Serum from the blisters of a pellagrin agglutinates the organism from the same patient and other pellagrins also.

Fourth, one of the several healthy persons previously examined with negative results, after accidental exposure in a laboratory, developed symptoms of grippe which later proved to be pellagra. The organism was isolated from the stool on the third day after symptoms developed.

The organism was again isolated from the stool eight and twelve months later.

For the treatment of pellagra it seems that Ichthyol, grains 5, in pills or peppermint water, or Copper arsenite grains 1-100th three or four times a day gives best results. Other drugs are occasionally indicated as various symptoms arise. An immunity or cure seems to be established in most cases within a few weeks.

FOCAL INFECTION A CAUSE OF ERYTHEMA MULTIFORME.*

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The subject I am about to present to you is one which should prove of interest to the General Practitioner as well as to the Dermatologist. You have all heard about this skin disease called Erythema Multiforme. It constitutes about 1% of Dermatological conditions and is to be found everywhere and among all classes of individuals. I do not think there is another skin disease which has so many etiological factors.

The exact causes of Erythema Multiforme are obscure and still to be discovered. I have listed below a number of these causes, placing the most important one at the head of the list, and that is the formation of intestinal Toxines.

The use of stale foods and the eating of oysters, fish, crabs, and all forms of sea food are also causative. On the other hand in these very severe cases there seems to be an infectious background, according to some writers as Vidal, Leloir, and others, epidemics have been reported by some observers and other observers have reported the findings of bacteria in these cases, but they are not agreed on the same organisms. Seasons of the year appear to have an effect as they are more frequent in the spring. It is found in conjunction with rheumatic conditions. Both sexes are subject to this disease, but women are more frequently afflicted than men, and it is supposed to be more frequent during early adult life, but from my experience it would appear to be more frequent amongst the middle aged. Changes in surroundings, modes of living, and in foods are also causative. This is borne out by the fact that we find it in immigrants and in people who are accustomed to country life and move to the city to live. Many drugs are supposed to be causes such

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as iodides, copabia, and the coal tar preparations. Uretheral irritation in men and menstrual disturbances in women are very often causative. Antitoxins produced this disease in some instances.

I have enumerated the various causes of Erythema Multiforme, but I will now add another cause which from my experience is a very important one and that is Focal Infection. In the Journal of A. M. A. of October, 1918, there is a very interesting article by Dr. Ravitch and Steinberg, on "Focal Infections as a cause in certain Dermatoses" amongst which we find Erythema Multiforme. I make this rule in my practice that whenever I get a case of Multiforme Erythema I always eliminate the possibility of an infective Foci before instituting other methods of treatment, the mouth, teeth, tonsils and nose being given the most attention as it is here that we often find the source of trouble. When a patient comes to me with Erythema Multiforme and I find any evidences of infection such as ulcers, cuts, and vesicular eruption that have become postular my mode of treatment is directed principally to clearing up these foci and as you will see from the following reports of cases with beneficial results.

CASE I.

A young doctor, aged 29 years, who was treated by me about three to four years ago. When I first saw this patient he had a rather extensive eruption of Pompholyx on hands and feet. He was treated for this about one week when in some unaccountable way (all aseptic precautions having been taken) the lesions became infected and in about two or three days he was covered by an eruption of Erythema Multiforme, every part of his body being affected. This condition persisted for about three months. It was one of the most stubborn cases of this disease that I have ever seen. There is no doubt in my mind that the formation of pus in vesicules produced a toxine which reacted on the system causing this general eruption.

CASE II.

Mr. E. P., age 46, Longshoreman, well nourished individual, was working on river front when he was struck on the leg by a piece of wood causing an ugly cut in leg. This then became infected, causing a great deal of pain, but he paid no attention to this until he woke up one morning to find his arms, leg, abdomen and back and face covered by an eruption. He sent for his family physician, who called me in consultation. On my arrival I found him with an eruption of Multiforme Erythema, but also found that the wound on leg was badly infected. From his history the eruption on body developed about four to seven days after injury. In this case my measures of treatment were centered at clearing up infection of leg. General treatment for Multiforme Erythema was also instituted. As ulcer on leg became better and better a marked improvement was noted in the other condition. In this case the Multiforme Erythema cleared up at about the same time as ulcer on leg healed. That is in about two to three weeks. This man has up to now never had a recurrence and remained completely well.

CASE III.

Mr. R. H., age 45, from the country, came to New Orleans for treatment. He came to see me at one of the hospital's free clinics covered with an eruption of Multiforme Erythema from head to foot. He claimed to have had this condition for a period of two and one-half years. Never at any time completely free, sometimes worse, sometimes better. The regular treatment measures were given, but after innumerable treatment with various drugs our man showed no improvement. I then decided to look around for a possible source of infection, and all that I could find was a set of very bad teeth. I then advised him to see a dentist and have his mouth placed in first-class shape, which he did. I lost trace of my man for about three months, as he returned to the country. At the end of that time he came back to New Orleans, dropped in to see me and he did not appear to be the same man at all, as he was completely well. He said that all the teeth in his mouth had been removed, and he was wearing false teeth. He said that about three weeks after teeth had been removed he began to feel much better and gradually as his mouth was placed in better condition he began to get better and better, and that in about two months from time the dentist began to work on his mouth he was completely cured and has remained so up to the present time.

CASE IV.

This was a lady, Mrs. R. D., age 38, with a severe eczema of the hands and feet. She had endeavored to treat herself, but as in most of these cases it was unsatisfactory and the eczema lesions became infected and very painful, but did not think it was necessary to see a physician and that she could cure herself. But when she awoke a few mornings later she was covered with an eruption over her chest and arms which frightened her and caused her to send for me. She was suffering from two distinct conditions. One an eczema and the other a Multiforme Erythema. Here again the Multiforme Erythema only developed four to six days after the infection of hands has taken place, and by treating the infection was able in a short time to cure her of the Erythema entirely.

I have presented you with four cases and in each one it is evident that a focus of infection was present. Now

some may say that this is only a coincidence, but that the Erythema would have developed just the same. But to me there is no doubt that the Infective Foci were the cause of these cases of Erythema Multiforme. Now I do not mean to say that Multiforme Erythema are due solely to infection because that is not my idea and as I have already said in the beginning of this paper there are very many other causes of Erythema Multiforme, but I think that if we remember Focal Infection as one of the causes of Erythema Multiforme we will be able to clear up many a stubborn case.

DISCUSSION.

Dr. Ralph Hopkins (New Orleans): We have all listened with a great deal of interest to Dr. Oriol's able presentation of one of the important problems frequently presented for solution to both the general practitioner and the specialist.

If I may be permitted to depart a little from the subject of Dr. Oriol's paper, I would say that the same etiologic factor of infection may often be found in other diseases of the skin more or less closely allied with the group of erythema multiforme, notably the urticarias, certain eczemas, and a large group that may be called toxic dermatoses.

The focus of infection in these groups is not always easy of determination. A focus suspected as the causative factor may be removed without relief of the skin symptoms. Some other less obvious focus may exist elsewhere and be the responsible cause. In late years the teeth have been much under suspicion and we have all been rather in the habit of expecting that the extraction of teeth with abscessed roots will remove the cause of such diseases as erythema multiforme. I think we may frankly admit, however, that we are frequently disappointed. It is in this latter contingency that I wish to emphasize the point made by Dr. Oriol, that the logical search for the cause should not be abandoned. In illustration of this point I might mention a case at present under treatment who has had several abscessed teeth removed without relief, and whose urinary bladder must now be regarded as the next most probable focus of infection.

A second unusual case is a rather typical erythema multiforme following an exposure to poison oak. This cleared up, then there was a second eruption without new exposure. The question was, was the erythema multiforme due to toxicodendron poison absorbed into the circulation, or to pus products in lesions?

New Orleans Medical
and
Surgical Journal

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THE S. M. A.

At a recent meeting of the Orleans Parish Medical Society, a resolution to extend an invitation to the Southern Medical Association to hold their 1924 meeting in New Orleans was unanimously adopted. It has been over fifteen years since this body has honored New Orleans with its presence. At that time the membership was not large, but those who did compose the vanguard were the salt of Southern medicine. This is demonstrated by the fact that the S. M. A. now encompasses sixteen States below Mason and Dixon's Line and in size and influence ranks second only to the American Medical Association. Let us hope that the association will look upon our invitation with favor. The Second Port in the U. S. A. stands with arms extended.

CHARITY HOSPITAL.

At the annual meeting of the Charity Hospital Staff, held last month, following the annual report of the president, Dr. John F. Oechsner, the body adopted unanimously a resolution to address the various candidates in the coming gubernatorial primary, directing them to give expression as to their attitude on taking the Hospital out of politics. This is the first time, in the history of the Institution, that a Staff has ever had the courage to take such a stand. The Charity Hospital has always been considered legitimate spoil by the incoming political administration and because of this the entire hospital organization suffers change every four years —to the detriment of patients and staff alike. It is earnestly hoped by every loyal citizen of Louisiana that this abomination soon will be but a memory of something departed never to return.

A CENTENARY.

The *London Lancet*, founded in 1823, Great Britain's oldest medical weekly, will soon celebrate its 100th birthday. It is at this day one of the leading medical journals of the world. Since its founding anaesthetics, antiseptics, and bacteriology, as well as many other fundamental contributions to medicine, have been made. Truly, this journal has something to celebrate, and we extend to our brother across the seas, our heartiest congratulations and best wishes for a life indefinite.

IS SCIENCE INCOMPATIBLE WITH RELIGION?

There has been much discussion in the lay press, of late, relative to this subject, but, especially whether or not one can be an evolutionist and, at the same time, be sincerely a believer in God and the Bible; in other words, can we be Darwinians or modified-Darwinians and still respect the narrative of the creation of the earth, as it was taught to us in Sunday school?

We should preface our answer by stating that, to the scientific mind, the process of human evolution is no longer a theory, but a fact; we do not necessarily have to agree, in toto, with Darwin's ideas, but whether we be Christian, Jew, Mohammedan, Pagan, atheist or agnostic, we accept the essential point. The most interesting dissertation on this subject that has been published of late is a small volume by that venerable and esteemed surgeon, Professor Wm. W. Keen of Philadelphia (Lippincott, 1923); the booklet, which is an enlargement of a commencement address delivered by him to a Theological Seminary, last year, is thus dedicated: "To all sincere seekers after truth; who revere the Bible as the word of God; who revere Nature as the work of God; who believe that, rightly interpreted, they must surely agree." In this work, Dr. Keen goes on to show, by anatomical, surgical, physiological and pathological facts, the unity of the animal kingdom, including man; he dwells on well-known ancestral vestiges, heredity, evidences from fossil man, etc., and then concludes with a chapter on "Evolution of Culture and Civilization." Dr. Keen's book might not convince a skeptic, like a well known man in the political life of our country, who considers evolutionary beliefs sacriligious, but it will appeal, very strongly, to the "everyday man on the fence" or one open to conviction.

We should all be missionaries on these facts; honor and respect the Bible, rightly interpreted, but, at the same time, not shutting our eyes to science and scientific research.

RATIONALE OF A SANITARY CODE.

By the term "Code" is understood a series of rules and regulations by which our actions along certain lines of conduct are guided. The legislative machinery of many lands, notably those of continental countries is very frequently divided into two classes, which are termed respectively the Civil and Criminal Codes and which in printed forms contain a digest of the principal laws pertaining to civil and criminal delinquencies. These codes are for the direction of the legal profession in the prosecution of cases; they are in effect the spirit in contradistinction to the letter of the law converted into terse but comprehensive statements and committed to print.

The Sanitary Code is a similar institution. It is primarily written for the guidance of the health officer of the state. It may be regarded as a series of rules and regulations based upon existing laws, sometimes even the exact wording of the statutes where such is deemed advisable, always constructed with the idea of clarity of interpretation as the main issue. The regulations promulgated by municipal and parish bodies in order to meet the peculiarities of situation, environment or otherwise, must be regarded as auxiliaries to the State code which cannot cover all possible conditions.

The Code embodies within itself both the legal aspect of sanitary principles, as well as the fundamentals of Preventive Medicine and Public Health. It attempts to explain these in language readily understood as well as the law and its practical application to public benefit in terms of medical science. It is a guide and mentor to those whose duties are the prevention of disease, and of unsanitary nuisances which are the forerunners of disease. While it is not in itself the law it interprets the law and therefore has the backing of the legal power of the State in the enforcement of its requirements.

The New Louisiana Code which has just been issued is arranged in a series of chapters each one of which pertains to some subject of vital importance from the sanitary or health standpoint. Each chapter is again subdivided into articles which handle the phases of the chapter title. Inasmuch as it is impossible to anticipate all possible contingencies the articles are, in general, not devoted to specific instances, except in those cases where minute directions are of paramount importance.

To the most important phases of Public Health belong the Communicable Diseases. These must, therefore of necessity be treated in extenso. Then too the Quarantine regulations which are those adopted by the United

States Public Health Service receive special attention.

The rules regarding Food Products and Drugs, their preservation, the manner of purveying, the marketing conditions and a host of other points including rules for inspection are fully covered in the appropriate chapter on Food Products regulations.

The sanitation of cities, towns and private dwellings as a part of Public Health activities receives attention in so far as such matters are likely to prove detrimental to public welfare, or play a part in the spread of disease.

There is a division for miscellaneous regulations on subjects which do not appropriately fall within the categories already mentioned. These include the inspections of weights and measures and oil.

These in a very few words are the main features of the information which the Sanitary Code provides for our guidance. Each and every point is in principle covered by legal enactment, or at least in minor detail received the approval of the State Board of Health. You will immediately perceive that the Sanitary Code provides you with a model upon which to base your parish and municipal health regulations, and in default or failure of the latter it provides you with prescribed course of action in periods of emergency.

It is not to be assumed that the Code represents a course of action which is infallible and susceptible of changes. Even though it is presumably clear as to just what should be done under certain conditions, it is yet sufficiently elastic to admit of different interpretations excepting, of course, where fundamental principles are involved. Then, too, changes are obligatory when alterations in custom or popular demand, or the advancement of medical and scientific knowledge seem to demand them. These changes are termed amendments and are promulgated from time to time according to the necessities of the times and judgment of the Board. Each health officer receives a copy of the amendment, which he is expected to attach to the appropriate page in his Code.

Just as we use our reference works in medicine when we come upon difficult or obscure cases in our practice, or when we want to accumulate additional knowledge on some cases which though we may be able to diagnose, we are not too well assured of all the possibilities in just such a capacity we employ the Sanitary Code. It is in fact a vade mecum of the accumulated knowledge of how to handle difficult epidemic situations; and it tells just how far our authority extends in combating sanitary evils. It is intended to be a work of reference for the sanitarian, the health officer, the municipal councils and the police juries. It is not claimed that the last degree of perfection has been reached in framing it; no doubt there are many articles which could be subjected to revision and improvement.

But neither are the laws of the land the acme of legal perspicacity and justice and of righteousness. The reason is clear. Both are the works of the human mind open alike to the fallabilities of personal prejudice, imperfections of judgment and limited knowledge. Still it would appear that the Code which we now have and which has been completely revised, extended, subjected to a critical examination, and entirely rearranged is, to say the least, an improvement over the previous one. It is sincerely to be hoped that it will receive the trust and consideration which its predecessor received and which the immense amount of work expended on its revision and compilation justly merits.

NEWS AND COMMENT

The Southern Medical Association will hold its seventeenth annual meeting at Washington, D. C., Monday, Tuesday, Wednesday and Thursday, November 12-15, 1923. Dr. W. S. Leathers, Executive Officer, Mississippi State Board of Health, Jackson, Miss., is President.

This meeting will be made up of twenty sections and conjoint meetings. The programs of these meetings will cover every phase of scientific medicine and surgery.

The President of the United States will receive informally the members of the Southern Medical Association and their wives, Thursday, November 15th, at 12:30 p. m. at the White House. Of special interest to the ladies will be the reception at the Washington Club on Tuesday afternoon, where Mrs. Woodrow Wilson will be the guest of honor. The usual reception to the President of the Southern Medical Association will be held on Tuesday night at the New National Museum, one of the most beautiful public buildings of Washington, a detachment of the Marine Band furnishing the music. Other special entertainments being received.

At the first general session on Monday night, in addition to the address of the President, Dr. Leathers, there will be an address by Dr. Geo. E. Vincent, President of the Rockefeller Foundation, New York, N. Y.; "Oration on Public Health" by Dr. W. S. Rankin, State Health Officer of North Carolina; "Oration on Medicine" by Dr. Stewart R. Roberts, Atlanta, Ga., and "Oration on Surgery" by Dr. J. W. Barksdale, Jackson, Miss.

A joint dinner by the Section on Surgery and the Section on Radiology, as well as a number of section dinners, will be interesting features of Tuesday evening. The Alumni Reunions which promise to be an outstanding feature of this meeting will be held on Wednesday night and it is expected that there will be large groups present from all of the leading medical schools.

Physicians who golf are urged to bring their clubs. There will be a golf tournament at which the usual prizes will be offered. Play will be over the championship course of the Columbia Country Club.

The University of Virginia Hospital, Charlottesville, have already announced special clinics for Friday and Saturday following the meeting. While no definite announcement has been made yet, it is anticipated that John Hopkins and the University of Maryland will arrange clinic programs for Friday and Saturday following the Washington sessions.

Washington has many splendid hotels and every one is assured of comfortable accommodations this year. Special reduced rates have been granted by railroads on the certificate plan. Each member of the Southern Medical Association will receive a certificate without application for it. Any physician who is a member of his state and county medical society, although not a member of the Southern Medical Association, who desires to attend this meeting, can have the benefit of these reduced rates by requesting a certificate from the association office.

New Orleans is honored in having Dr. Allen Eustis, Chairman of Section on Medicine; Dr. H. W. E. Walther, Chairman of Section on Urology, and Dr. F. M. Johns, Vice-chairman of Section on Pathology.

The National Malarial Committee (Conference on Malaria) meets in Washington, D. C., November 12, 1923, conjointly with the S. M. A., the officers being Dr. H. R. Carter, Assistant Surgeon-General, U. S. P. H. S., Honorary Chairman, Washington, D. C.; Dr. S. W. Welch, Chairman, Montgomery, Ala., and Dr. L. D. Fricks, Surgeon, U. S. P. H. S., Secretary, Memphis, Tenn.

The Conference on Medical Education in the South meets in Washington, D. C., November 13, 1923, with the following officers: Dr. M. L. Graves, Chairman, Galveston, Tex.; Dr. W. McKim Marriott, Vice-Chairman, St. Louis, Mo., and Dr. C. C. Bass, Secretary, New Orleans, La.

A Conference of Presidents and Secretaries of State Medical Associations and State Health Officers will be held in Washington, D. C., November 13, 1923, with the following officers: Dr. E. A. Hines, Chairman, Seneca, S. C., and Dr. Graham E. Henson, Secretary, Jacksonville, Fla.

The Medical Directors of Southern Life Insurance Companies will meet in Washington, D. C., November 13, 1923, officers of the association being: Dr. J. B. Steele, Medical Director, Volunteer State Life Insurance Company, Chairman, Chattanooga, Tenn.; Dr. J. W. Handley, Medical Director, Independent Life Insurance Company, Vice-Chairman, Nashville, Tenn., and Dr. R. C. Maddox, Assistant Medical Director, Volunteer State Life Insurance Company, Secretary, Chattanooga, Tenn.

Conference of Southern State Statisticians meets in Washington, D. C., November 12, 1923, with Dr. W. A. Davis, Atlanta, Ga., as president and Dr. R. W. Hall, Jackson, Miss., as secretary.

Women Physicians of the Southern Medical Association meet with S. M. A., November 13, 1923. The officers being: Dr. Elizabeth Kane, President, Memphis, Tenn.; Dr. Flo Brandeis, 1st Vice-President, Louisville, Ky.; Dr. Iva Youmans, 2nd Vice-President, Miami, Fla., and Dr. Josephine Hunt, Secretary-Treasurer, Lexington, Ky.

The Southern Association of Anesthetists meets in Washington, D. C., November 12-13, 1923, with the following officers for this year: Dr. Ansel M. Caine, President, New Orleans, La.; Dr. Olin W. Rogers, 1st Vice-President, Knoxville, Tenn.; Dr. Nettie Klein, 2nd Vice-President, Texarkana, Ark., and Dr. W. Hamilton Long, Secretary, Louisville, Ky.

Dr. C. A. Bahn attended the meeting of the American Academy of Ophthalmology and Oto-Laryngology held in Washington, D. C., October 15th to 20th, inclusive.

The owner of the Medical Building, 124 Baronne street, Mr. J. A. Legendre, Pharmacists, has announced that the policy of restricting the use of the building to doctors, as now in force is to be continued. Many improvements have been made in this building.

The regular semi-annual meeting of the Fourth District Medical Society was held in Shreveport, La., Tuesday, October 16th, 1923.

9:00 A. M.—Medical and Surgical Clinics-Shreveport Charity Hospital Staff.

Afternoon and Evening Session-Shreveport Charity Hospital.

2:00 P. M.—Call to order by the President Dr. J. G. Yearwood, Invocation Rev. M. E. Dodd.

Words of Welcome—Mayor L. E. Thomas. Dr. L. H. Pirkle, President Shreveport Medical Society.

SCIENTIFIC PROGRAMME.

1. Preparation and Post-operative Management of Abdominal Surgical Cases .....Dr. R. O. Simmons, Alexandria, La.
2. Gonorrhea in Women.....Dr. C. M. Baker, Minden, La.
3. Syphillis of the Stomach with Report of Cases .....Dr. D. L. Kerlin, Shreveport, La.
4. Post-operative Pulmonary Embolism .....Dr. J. E. Heard, Shreveport, La.
5. Eczema in Infancy and Childhood. .....Dr. M. S. Picard, Shreveport, La.
6. Orthopedic Conditions Among the Colored Race with Presentation of Cases .....Dr. Guy A. Caldwell, Shreveport, La.

Election of Officers.

Announcements by the Secretary.

Adjournment.

EVENING SESSION

7:30 P. M.—Dinner.

1. Charity Hospital Staff Meeting in Conjunction with Fourth District.

Informal Discussions.

Adjournment.

The Third Quarterly Meeting Seventh District Medical Society was held at Oakdale, La., Tuesday, October 2, 1923.

A delightful banquet was tendered by the Allen Parish Medical Society after which the meeting was called to order at the American Legion Home at 8 P. M.

Minutes of the previous meeting were read and approved. Thirty three doctors answered to roll call.

Miss Marion Dickson, a five year old, gave the address of welcome. The following Scientific Program was rendered.

1. "The Value of Cystoscopy in Diagnosis To The Clinician." With lantern slide demonstration, ...
....Dr. H. W. E. Walther, New Orleans, La
2. "The Significance of Uterine Hemorrrhage." With lantern slide demonstration, ...
.....Dr. R. O. Simmons, Alexandria, La.
3. "The Value of X-Ray Examination To The Clinician in The Diagnosis of Gastro-Intestinal Diseases." With lantern slide demonstration, ...
....Dr. G. C. McKinney, Lake Charles, La.

Four new members were admitted to the Society. The next meeting place and date were postponed, to be decided on later. Motion to adjourn.

The New Orleans Hospital for Women and Children and better known as the Women's Dispensary, announces that in the future the name will be changed to Women's Hospital. The staff is composed as follows: Eye, Ear, Nose and Throat, Dr. M. Earl Brown, Dr. J. R. Hume, Dr. Z. T. Young; Surgery, Dr. R. E. Stone, Dr. O. F. Ernst, Dr. A. F. Hebert; Gynecology and Obstetrics, Dr. Sara T. Mayo, Dr. Etta P. McCormick; Medical, Dr. P. L. Querens, Dr. D. A. Palmisano; Orthopedics, Dr. J. T. O'-Ferrall, Dr. H. L. Simmons, Neurologist, Dr. W. J. Otis; Radiologists, Dr. L. A. Fortier, Dr. Edna Brown; Gynecologist, Dr. R. J. Maihles; Skin, Dr. R. A. Oriol; Pathologist, Dr. J. A. Landford; Interns, Dr. Sara E. Huckaby; Dentist, Dr. H. T. Price.

Dr. P. J. Gelpi has been appointed to present to the Southern Medical Association the merits of the Louisiana plan for the care of Indigent Physicians.

The October meeting of Shreveport Medical Society was featured by a paper on "Middle Ear Diseases in Children" by Dr. T. D. Boaz, who has recently returned from a Post Graduate trip abroad. In addition, several interesting clinical case reports were received. Announcement was made of the forthcoming meeting of Fourth District Medical Society, the evening session of which will be held jointly with the Shreveport Charity Hospital Staff.

Died—Dr. Silas Youree Alexander (Tulane, 1903) died in Shreveport, September 25th, of complications following a serious operation about two weeks before. Dr. Alexander had been in unsatisfactory health for several years, but his death was a shock to his friends and associates.

Monthly Bulletin of the Shreveport Medical Society, October 1923.

SCIENTIFIC PROGRAM.

Middle Ear Infections in Children, by Dr. T. D .Boaz. Uterine Hemorrhages, by Dr. R. H. Blackman.

The regular monthly meeting of the Shreveport Medical Society was called to order by acting President Butler, at 8:10 p. m. The following twenty-four members were present: Drs. Barrow, Boaz, Bodenheimer, Boyce, Butler, Cassity, Caldwell, Dickson, Garrett, Gorton, Heath, Herold, Heard, W. S. Kerlin, D. L. Kerlin, Knighton, Lucas, Paine Paul, Rigby, Sanderson, Sims, I. Henry Smith, Young, Visitors: Drs. Gilmer, Barker, and members of the Charity House Staff.

There was no report from the treasurer or secretary. Dr. Sanderson reported for the Entertainment Committee on the social meeting of the Society held in August. Dr. Bodenheimer made a motion, which was seconded and passed, that the treasurer be authorized to reimburse the committee for the amount of the deficit incurred, $71.50, that the report be accepted, the committee thanked and discharged.

A letter was read from Dr. Litton stating that he had practiced the Abrams methods of treatment, but had found them to be without value, and that he does not intend to use them in the future. He declared his honesty of purpose and his desire to remain a member of the Shreveport Medical Society and of the Louisiana State Medical Society.

A letter was read from Dr. Dowling concerning Dr. E. R. Watters, Harlingen, Texas, a member, or former member of this society. The Society records

indicate that 1914 was the last year Dr. Watters' dues were paid.

Applications for membership in the Shreveport Medical Society from Drs. P. R. Gilmer and Don S. Marsailles were read out.

A motion was made by Dr. Bodenheimer that the check for this year's dues for Dr. Watters be accepted in order to enable Dr. Watters to get reciprocity with Texas. Motion passed.

The Secretary was instructed to write to Dr. Litton that in view of his conclusions as to the worthlessness of the Abrams methods of treatment and his decision to not practice them in the future the Society is glad to have him remain a member.

Drs. Quinn, Paine, D. L. Kerlin were appointed a committee on the application of Dr. P. R. Gilmer. Drs. Garrett, Rigby, Willis, Jr., were appointed a committee on the application of Dr. Don. S. Marsailles.

SCIENTIFIC PROGRAM.

Dr. J. M. Bodenheimer read an interesting paper on Pituitrin in the Second Stage of Labor. Discussion by Drs. Dickson, Butler.

Dr. J. E. Knighton gave an instructive talk on medical ethics and read extracts from the Code of Ethics of the Shreveport Medical Society. Discussion by Drs. Cassity, Rigby, Sanderson, Herold, Young, Bodenheimer.

Dr. Sanderson made a motion that a committee be appointed to go over the Code of Ethics, By-Laws, and Constitution of the Society, revise, bring up to date, and have printed. The motion was seconded by Dr. Rigby and was passed. Appointed on this committee were Drs. Knighton, Herold, Barrow, Sanderson, Bodenheimer.

CLINICAL CASES

Dr. D. L. Kerlin presented a very complete case history of a case of Para-Typhoid. Discussion by Drs. Knighton and Pauls. Dr. Cassity and Dr. Bodenheimer told of interesting cases.

Dr. T. D. Boaz who has recently returned after studying abroad was called upon and told about his trip. Among other things he called attention to the fact that in Vienna they are putting less reliance on Salvarsan than formerly as a sole agent in the treatment of syphilis and are using the old remedies more than heretofore.

On motion the Society adjourned at 9:55.

Robert T. Lucas, Secretary.

The Lederle Antitoxin Laboratories have moved to 205 New Medical Building, Prytania and Aline streets.

Washington, D. C., October 9, 1923. The Department of Commerce announces that provisional birth figures for the first three months of 1923 indicate slightly lower birth rates than for the corresponding three months of 1922. For the states compared the birth rate for the first three months was 22.4 in 1923 against 23.6 in 1922. The highest birth rate for the three months is shown for North Carolina (27.6) and the lowest for Vermont (15.8).

The hospitals of the United States and Canada spend over $500,000,000 a year for supplies and equipment. The expenditure of this huge sum calls for considerable planning and forethought as to varieties, types, and kinds selected, for not only are many new hospitals being built, but many of the present ones expanding their facilities to meet the needs of our growing population.

An event which may be fraught with far-reaching consequences for world health is the Third General Interchange of Health Officers arranged by the Health Section of the League of Nations which is now taking place in the United States.

Representatives from France, England, Italy, Russia, Poland, Spain, Holland, Belgium, Greece, Jugoslavia, Germany, Switzerland, Norway, Mexico, San Salvador, Brazil, Chile, and Canada, delegated by their respective governments to participate in a course of study and observation, arrived in America the first week in September and will remain for approximately three months.

Milwaukee, Wis., Oct. 9 (Special)—Chemical authorities in the universities have decided that the American people must be taught how to wash their faces

and their family linen scientifically.

For the first time in history, a concerted effort to experiment with the detergent action of soaps will be launched this autumn in the great laboratories of Cornell University, as the result of the announcement of the winner in the First "Palmolive Fellowship" by a group of leading scientists and chemical authorities here today.

Paul H. Fall, 5600 Drexel Boulevard, Chicago, has just been awarded the $2,000 fellowship, to be given annually by the Palmolive Company, so that he may devote himself to the purely scientific study of the chemistry, physics and colloid principles affecting soaps. Mr. Fall, himself a college professor, has decided to make his experiments at Cornell University.

BULLETIN OF THE LOUISIANA STATE MEDICAL SOCIETY.

By Dr. P. T. Talbot, Secretary-Treasurer.

We are just completing one of the most successful years of the Louisiana State Medical Society. Up to date we have enrolled 1,151 active members, which is the largest enrollment the State Society has ever enjoyed, with the exception of the year in which the American Medical Association held their annual meeting in New Orleans. Not only have we increased our numerical strength, but judging from the activities of the various District Medical Societies, the by-Parish Medical Societies, Parish Medical Societies, and the re-organization of various Parish Medical Societies, we have every reason to believe that there has been a decisive stimulus in medical activities throughout the State. The reports from these various meetings show a full attendance of its component members in conjunction with unusual Scientific Programs which is a credit to them and to our Society. Unusual requests have come to us for assistance in formulating a Scientific Program which we have always given gladly. We will be only too glad to aid any of the Secretaries or members of Scientific Committees in formulating their program.

I wish to take the advantage of this opportunity to call attention to the various Parish Societies and to all members of the State Society, that as far as membership in the organization is concerned, the fiscal year for 1923 will be completed by December 1st. According to the by-laws, dues for the fiscal year for 1924 are due in advance, and are therefore payable any time during the month of December. The Secretaries of the various Parish Societies should begin at once after December 1st to collect the annual State dues from its members for 1924, and remit as promptly as possible to the Secretary-Treasurer at 1551 Canal street. In this regard it would be wise to call your attention to the fact that the protection under the Medical Defense of the State Society is covered from the time that each individual due is received by the Secretary-Treasurer of the State Society. It is therefore urgent that these dues be remitted as promptly as possible in order that one may enjoy full protection under our Medical Defense act.

The following Chairmen of the Sections for the Scientific Program of the Louisiana State Medical Society, to be held in Opelousas, April 22nd to 24th, 1924, have been appointed by the President, Dr. Lester J. Williams, and accepted:

Medicine and Therapeutics—Dr. George S. Bel.

Nervous Diseases—Dr. John N. Thomas.

Health and Sanitation—Dr. E. M. Ellis.

General Surgery—Dr. R. C. Kemp.

Gynecology and Obstetrics—Dr. Maurice Gelpi.

Urology—Dr. Paul J. Gelpi.

Others will be announced as soon as completed. All the members of the State Society desirous of reading papers at our next annual session, would find it expedient to communicate at once with the respective chairmen for a place on the program. I am sure that our Scientific Program will be completed very early, as arrangements are in formation for same a few months earlier than we have ever been able in the past to do. The Secretary-Treasurer's office will be very glad to assist in this work, and as Chairman of the Scientific Essay Committee, I would respectively solicit your prompt

attention to this important detail. It is only by co-operation in this regard that we will be able to formulate the Scientific Program and get it out in proper form for our next annual meeting. Plans are beginning to develop for an unusual annual meeting at Opelousas, and we have every reason to believe that each and every one of us may look forward to a great deal of pleasure to our meeting again.

So let's get our membership in early and send in our scientific request promptly, and in every way assist the officers and Arrangement Committee to perfect their plans early.

REMOVALS.

Adiger, David—From 630 Maison Blanche Building, to 514 Medical Building, 124 Baronne street.

Davis, R. A.—From 508 Medical Building, to 507 Medical Building.

Dicks, John F.—From 830 Whitney Central Building, to 815 Whitney Central Building.

Fenner, E. D.—From 1915 St. Charles Avenue, to 1820 St. Charles avenue.

Jacobs, A.—From 630 Maison Blanche Building, to 514 Medical Building.

Kearney, H. L.—From 1101 Maison Blanche Building, to 517 New Medical Building, Prytania and Aline.

Leake, J. P.—From 1101 Maison Blanche Building, to 517 New Medical Building, Prytania and Aline.

Ledoux, Lucien A.—From 2117 Tulane avenue, to 810 Maison Blanche Annex.

Lewis, E. S.—From 203 Medical Building, to 1625 Louisiana avenue.

Lewis, J. L.—From 421 Macheca Building, to 1216 Maison Blanche Building.

Loeber, Maud—From 1424 Milan street, to 307 New Medical Building, Prytania and Aline.

Metz, W. R.—From 9 Rosa Park, to Cusachs Building.

McCormack, E. P.—From 518 Macheca Building, to 810 Maison Blanche Annex.

Pollock, J. E.—From 627 Olivier street, to New Medical Building, Prytania and Aline.

Pothier, O. L.—From 610 South Carrollton avenue, to 210 Medical Building.

Smith, J. W. A.—From 636 Common street, to 3435 Prytania street.

Socola, Edwin A.—From Charity Hospital, to U. S. Marine Hospital.

Stumpf, Louis J.—From 803 Maison Blanche Annex, to 1410 Hibernia Building.

Goorwich, Mary—From Touro Infirmary, to 1522 Aline street.

Robbins, I. L.—From Charity Hospital, to 2207 Baronne street.

Faivre, G. W.—From 1226 Maison Blanche Building, to 1124 Maison Blanche Building.

Fuchs, V. H.—From 1116 Maison Blanche Building, to 1207 Maison Blanche Building.

Cocker, G. F.—From 1105 Maison Blanche Building, to 5941 Magazine street.

Batchelor, J. M.—From 1210 Maison Blanche Building, to Presbyterian Hospital.

Maxwell, T. A.—From 1210 Maison Blanche Building, to Presbyterian Hospital.

Warren, J. W.—From Houma, La., to 503 New Medical Building.

Bohne, P. W.—From 620 Maison Blanche Building, to 1232 Maison Blanche Building.

Wymer, J. J.—From 620 Maison Blanche Building, to 840 Gravier street.

Lopez, L. V.—From 421 Godchaux Building, to 611 Godchaux Building.

Fenno, F. L.—From 407 Old Medical Building, to 411 New Medical Building, Prytania and Aline streets.

Daspit, H.—From 415 Old Medical Building, to 411 New Medical Building, Prytania and Aline streets.

Silverman, D. N.—From 624 Maison Blanche Building, to 419 New Medical Building.

Ragan, Thos.—From Hutchinson Building, to 500-02 Giddens Lane Building, Shreveport, La.

Moss, Edmund—From Old Medical Building, to 411 New Medical Building.

Clark, S. M. D.—From Cusachs Building, to New Medical Building.

Durel, W. J.—From 312 Medical Building to Covington, La.

Allen, C. W.—From 509 Macheca Build-

ing to 409 Physicians and Surgeons' Building, New Orleans.

Querens, P. L.—From 1109 to 1116 Maison Blanche Building.

Lewis, J. L.—From 421 Macheca Building to 1216 Maison Blanche Building.

DeReyna, Geo. J.—From 3529 Prytania street, to 312 Macheca Building.

Crebbin, John T.—From 1207 Maison Blanche Building, to 1210 Maison Blanche Building.

PUBLICATIONS RECEIVED.

Washington Government Printing Office, Washington, D. C.; *U. S. Naval Medical Bulletin*, Vol, 19, No. 3, September, 1923.

Public Health Reports, Vol. 38, Nos. 33, 37, 38, 39.

Miscellaneous: *Manual on Ship Sanitation and First Aid for Merchant Seamen*, by Robert W. Hart, Second edition. *Colonic and Duodenal Lavage With a Suggested Improvement in the Plombieres Treatment*, by Capt. J. T. Ainslie Walker, R. A. M. C. (T. F.).

REPRINTS.

Investigations on the Control of Hookworm Disease. XXII. Experiments on the Factors Determining the Length of Life On Infective Hookworm Larvae, by Donald L. Augustine; XXIV. *Hookworm Cultures with Humus, Sand, Loam, and Clay*, by Norman R. Stoll, M. S.; XXV. *The Use of the Egg-Counting Method in an Intensive Compaign*, by Rolla B. Hill, M. D.; XXVII. *The Study of An Area in the Mountains of Porto Rico, Which Had Been Influenced For Twenty Years by Hookworm Control Measures*, by William W. Cort, Ph. D., William A. Riley, Ph. D., and George C. Payne, M. D.; XXIX. *A Study of the Relation of Coffee Cultivation to the Spread of Hookworm Disease. Value of Carbon Tetrachlorid As An Anthelmintic*, by J. F. Docherty, B. A., M. B. (Tor.). *The Intensive Radiotherapy of Cancer, Is It a New Method?*, by A. Joseph Riviere, M. D., Paris. *An Unusual and Fatal Case of Undulant Fever Contracted in Khartoum*, by R. G. Archibald, D. S. O., M. D. *Lung Compression by Heavy Liquid Paraffin in the Treatment of Lung Tuberculosis, Bronchiectasis and Lung Abscess*, by F. W. McGuire, M. D., F. A. C. S. *Lichen Planus Hypertrophicus in the Sudan*, by R. G. Archibald, D. S. O., M. D. *Erythrodermia Congenitale Ichthyosiforme In An Arab Child*, by R. G. Archibald, D. S. O., M. D. *A Case of Paget's Disease Associated With Carcinomatus Infiltration of the Breast of a Male Native of the Sudan*, by R. G. Archibald. *An Unusual Type of Nodular Leprosy in the Sudan*, by R. G. Archibald, D. S. O., M. D. *Some Investigations Connected With the Spread of Bilharziasis in the Dongola Province of the Sudan*, by R. G. Archibald, D. S. O., M. D.

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